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3:59 pm, Sep 02, 2011
Alameda County
Environmental Health

August 25, 2011

Mr. Paresh Khatri
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Subject: Freedom Food and Gas (Formerly Freedom ARCO Mini-Mart)
Site Address: 15101 Freedom Avenue, San Leandro, California
STID 4473/RO0000473

Dear Mr. Khatri:

SOMA's "Limited Off-Site Investigation" for the subject property has been uploaded to the State's GeoTracker database and Alameda County's FTP site for your review.

Thank you for your time in reviewing our report. Please do not hesitate to call me at (925) 734-6400, if you have questions or comments.

Sincerely,

Mansour Sepehr, Ph.D.,PE
Principal Hydrogeologist

cc: Mr. Mohammad Pazdel w/report enclosure

Limited Off-Site Investigation

Freedom Gas and Food
15101 Freedom Avenue
San Leandro, California

August 25, 2011

Project 2552

Prepared for

Mohammad Pazdel
1770 Pistacia Court
Fairfield, California

SOMA ENVIRONMENTAL ENGINEERING, INC.
6620 Owens Drive Suite A Pleasanton CA 94588 Ph: 925.734.6400 F: 925.734-6401 www.somaenv.com

PERJURY STATEMENT

Site Location: 15101 Freedom Avenue, San Leandro, California

"I declare under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge".

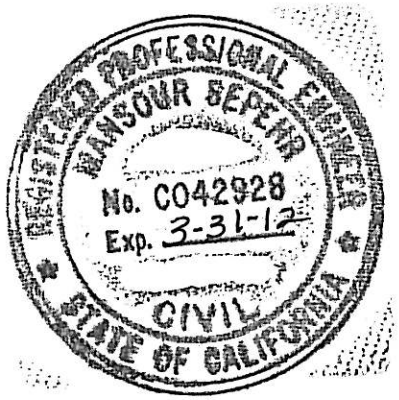
M. R. Pazdel

Mohammad Pazdel
1770 Pistacia Court
Fairfield, California 94533
Responsible Party

CERTIFICATION

SOMA Environmental Engineering, Inc. submits this report on behalf of Mr. Mohammad Pazdel, owner of the property located at 15101 Freedom Avenue, San Leandro, California. This report has been prepared pursuant to correspondence of Alameda County Health Care Services – Environmental Health Services dated May 12, 2011, approving the workplan.

Mansour Sepehr, PhD, PE
Principal Hydrogeologist



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1. INTRODUCTION

1.1 Overview

SOMA Environmental Engineering, Inc. (SOMA) has prepared this report documenting results of a limited off-site investigation at 15101 Freedom Avenue, San Leandro, California. During Fourth Quarter 2010 groundwater monitoring, elevated levels of petroleum hydrocarbons (PHCs) were detected in MW-6, an off-site well located next to groundwater extraction well EX-2. As a result, SOMA recommended an off-site investigation study to evaluate the extent of off-site chemical plume and the effectiveness of the current site remediation.

In correspondence of May 12, 2011 to Mr. Mohammad Pazdel, property owner, Alameda County Health Care Services – Environmental Health Services (ACHCS) approved SOMA's workplan dated March 3, 2011 to conduct this off-site investigation around MW-6 to determine the extent of elevated PHC concentrations. This report provides details of the investigation.

1.2 Site Location and Description

The site is located at the foot of the San Leandro Hills, along the west side of San Leandro Valley (Figure 1). It is bounded on the north by Freedom Avenue, on the east by Fairmont Avenue, on the south by residential properties and on the west by 151st Avenue. It currently operates as a Texaco gasoline service station with mini-mart, and retails Texaco-branded gasoline and diesel fuel. No automotive repair facility is on the site. Three canopied product dispenser islands are on-site as well as three underground storage tanks (USTs): one 6,000-gallon diesel UST, one 8,000-gallon gasoline UST, and one 10,000-gallon gasoline UST. Figure 2 illustrates site features.

The site has operated as a gasoline service station since the 1960s. Mr. Pazdel, the responsible party, sold the property to Farrokh Hosseinyoun in 2010. Mr. Hosseinyoun subsequently sold the property to Mohammad Mashhoon in 2010. The station currently operates under the business name Freedom Gas and Food (formerly Freedom ARCO Mini-Mart). Previous site activities are summarized in Appendix A.

There is no water body within a half-mile radius of the site. The nearest water body, Estudillo Canal, is located about 0.6 miles southwest. The next closest water body is San Leandro Creek, approximately 1.5 miles south. East of the site are the northwest-trending Hayward Fault Zone, the San Leandro Hills, and an assemblage of ultramafic metamorphic and volcanic rocks (California Division of Mines and Geology, 1990). The site is located in the East Bay Groundwater Basin of the San Francisco Bay hydrologic study area. Water-bearing formations include the Santa Clara Formation of Plio-Pleistocene age and late Pleistocene, and recent sediments that have been grouped as Late Quaternary alluvium.

Non–water-bearing units underlie the water-bearing formations and are exposed along the surface in the Diablo Range east of the site and Coyote Hills, near Newark, which is south of the site.

The cone penetrometer test (CPT) and membrane interface probe (MIP) program conducted by SOMA in September 2006 identified two main water-bearing zones (WBZs) within the depths explored by CPT, designated the First and Second WBZs. Based on CPT data, both WBZs appear to be laterally continuous across the site, and are separated by a laterally continuous aquitard. From approximately 12 to 22 feet below ground surface (bgs), the First WBZ occurs as an approximately 10- to 15-foot-thick interbedded sequence of sand, silty sand to sandy silt, cemented sand, and silt to clayey silt. The groundwater monitoring well network in the on- and off-site areas is completed within the First WBZ. Nine groundwater monitoring wells, six on-site and three off-site, are monitored quarterly. Groundwater elevations measured in wells over the period of record for quarterly groundwater monitoring (Second Quarter 2002 to Fourth Quarter 2008) reflect potentiometric head in the First WBZ, with the groundwater flow gradient in the First WBZ predominantly toward the south/southwest.

From approximately 32 to 50 feet bgs, the Second WBZ occurs as an approximately 5- to at least 35-foot-thick interbedded sequence of the same lithologic type seen in the First WBZ. No groundwater monitoring wells are completed in the Second WBZ. During grab groundwater sampling activities in September 2006, after setting the discrete water sampler, groundwater elevations rose immediately above the top of the sampler and into the hollow push rods. This implies that groundwater in the Second WBZ reflects potentiometric pressure. Therefore, the Second WBZ can also be considered a confined aquifer. Because no groundwater monitoring wells are screened in the Second WBZ, its groundwater monitoring flow direction and degree of impact are not known.

The First and Second WBZs are separated by a 5- to 25-foot-thick, laterally continuous, unsaturated layer of clay, clayey silt, and silt. This unit is referred to as an aquitard. Of the two WBZs beneath the site, it appears that the majority of site-related contaminants are present in the First WBZ.

Historical groundwater investigation results indicate that the Second WBZ has not been significantly impacted by petroleum hydrocarbons. Therefore, no active remediation is warranted. Soil gas survey results indicated that soil vapors in subsurface do not pose a significant health risk to off-site residents. Multi-phase extraction (MPE) pilot test results have indicated that this technique is effective in removing PHCs from groundwater. During the MPE pilot test in November 2007, 106 pounds of PHCs were removed from the subsurface. Results of our evaluation indicate that because groundwater occurs at greater depths than utility lines, public utility lines and conduits in the vicinity do not act as preferential flow pathways.

Sensitive receptor survey results indicate that the off-site groundwater plume could impact two private wells, one reportedly located at 1575 153rd Street and the other at an unidentified address along Oriole Avenue. Analytical results for groundwater samples collected from well on 153rd Street showed only tertiary-butyl alcohol (TBA), at 21 µg/L. The well on Oriole Street could not be sampled and is no longer operational. No active remediation of the Second WBZ is warranted. However, monitored natural attenuation (MNA) is recommended for the First and Second WBZs.

Results of SOMA's evaluation showed that utilizing MPE (in combination with pump-and-treat) on an intermittent basis is the most feasible and least costly alternative. Due to high costs of a permanent MPE system in connection with purchase, installation, operation and maintenance, as well as issues related to Bay Area Air Quality Management District (BAAQMD) permitting, it is not cost effective to utilize MPE on a permanent basis.

2. SCOPE OF WORK

The scope of work includes an off-site investigation to determine the extent of groundwater contamination in the vicinity of MW-6.

The scope of work included the following:

1. Fieldwork preparation
2. Advancement of borings
3. Waste disposal
4. Laboratory analysis of soil and groundwater samples

2.1 Fieldwork Preparation

Before initiating field assessment activities, SOMA obtained required encroachment and drilling permits from the Alameda County Public Works Agency (ACPWA) (encroachment permit R11LD11497, drilling permit W2011-0354, Appendix B). Traffic control plans, one for each drilling location, were prepared and submitted to the County for approval. The approved traffic plans were utilized during drilling activities (Appendix B). SOMA retained Traffic Management, Inc. to execute the approved traffic plans. SOMA submitted all required drilling notifications to the ACPWA and ACHCS in advance of drilling activities.

SOMA prepared a site-specific Health and Safety Plan (HASP). The HASP is a requirement of the Occupational Safety and Health Administration (OSHA), "Hazardous Waste Operation and Emergency Response" guidelines (29 CFR 1910.120) and the California Occupational Safety and Health Administration

(Cal/OSHA) “Hazardous Waste Operation and Emergency Response” guidelines (CCR Title 8, section 5192). The HASP is designed to address safety provisions during field activities and protect the field crew from physical and chemical hazards resulting from drilling and sampling. It establishes personnel responsibilities, general safe work practices, field procedures, personal protective equipment standards, decontamination procedures, and emergency action plans. The HASP was reviewed and signed by field staff and contractors prior to beginning field operations at the site.

On June 21, 2011, SOMA notified Underground Service Alert (USA) to ensure drilling areas were clear of underground utilities (USA number 198487), which was renewed on July 14, 2011. Following USA clearance, on July 20, 2011 SOMA retained a private utility locator (OJH Subsurface Utility Locator) to survey proposed drilling areas and locate any additional subsurface conduits. On July 20, 2011, SOMA retained Osborne’s Concrete Coring to core the surface asphalt and concrete at each drilling location.

2.2 Borings Advancement

Between July 20 and 21, 2011, under SOMA’s oversight Gregg Drilling and Testing (Gregg), a licensed C-57 driller, advanced five soil borings in the vicinity of MW-6 and EX-2 within the First WBZ. Boring locations are illustrated in Figure 3. Locations were selected based on the presence of elevated levels of site-related contaminants in MW-6, as discussed in the Fourth Quarter 2010 groundwater monitoring report dated January 11, 2011. It should be noted that boring DP-2 had to be shifted southwesterly from its original location due to the presence of multiple utility lines at its originally proposed location.

Prior to boring advancement, depth to groundwater in the adjacent wells was measured in order to verify the target boring depth. The observed depth to water was 15 feet bgs. Therefore, all borings were advanced to 30 feet bgs, as originally proposed. Direct Push Technology (DPT) was utilized to advance these borings; to clear all underground utilities, each boring location was hand augered to 5 feet bgs. Soil samples were collected from areas of gross contamination of each boring for chemical analysis. In addition, per ACHCS correspondence dated May 12, 2011, soil samples were also collected at changes in lithology, at capillary fringe, and at the terminal depth of each boring.

DPT is an efficient method of collecting continuous soil cores while preventing cross-contamination; it involves hydraulically hammering a set of steel rods into the subsurface with the lead section consisting of a polyethylene-lined sampler. After drilling rods were pushed to the desired depth, the soil-filled liner was retrieved. Each boring was continuously cored, and descriptions of cored soil were entered in logs (Appendix C) in accordance with the Unified Soil Classification System (USCS). In addition, cored soil sections were checked for hydrocarbon odors and visual staining, and screened using a photo-ionization detector (PID). PID readings were noted on boring logs.

During boring advancement, multiple interbedded layers of sandy lean clays, clayey sands, silty sands and well graded sands were encountered. Groundwater was first encountered in borings DP-1 through DP-5 between 20 and 26.5 feet bgs and was later stabilized between 15.9 and 19 feet bgs. Boring logs attached in Appendix C illustrate lithologies encountered for each advanced boring.

SOMA collected grab groundwater samples from each soil boring using a temporarily installed perforated PVC casing. A disposable bailer was used to evacuate a desirable amount of groundwater and decant it, slowly to avoid volatilization, into appropriately preserved laboratory-supplied containers. Each sample was labeled with a unique sample identifier and preserved on ice pending delivery to a certified analytical laboratory. All samples were delivered to the laboratory for chemical analysis under appropriate chain-of-custody protocol.

Following sampling, borings were destroyed with a neat cement grout mixture, tremmied into place, and completed at the surface with materials to match existing grade.

2.3 Waste Disposal

Soil cuttings generated during soil boring advancement were temporarily stored on-site in a secure area in a DOT-rated 55-gallon steel drum pending characterization, profiling, and transport to an approved disposal-recycling facility. This drum was labeled with site address, contents, date of accumulation, and contact phone number.

On August 25, 2011, one 55-gallon drum of non-hazardous solid waste (soil cuttings) generated during drilling operations was transported from the site to a licensed disposal facility (waste manifest, Appendix D).

2.4 Laboratory Analyses of Soil and Groundwater Samples

As described in the previous section, groundwater samples, along with selected soil samples based on PID readings, were submitted to a California state-certified environmental laboratory for chemical analysis of the following:

- Total PHCs as gasoline (TPH-g)
- Benzene, toluene, ethylbenzene, total xylenes (collectively termed BTEX)
- Fuel oxygenates, additives and lead scavengers including methyl tertiary-butyl ether (MtBE), tertiary-butyl alcohol (TBA), ethyl tertiary-butyl ether (ETBE), diisopropyl ether (DIPE), tertiary-amyl methyl ether (TAME), 1,2-dichloroethane (1,2-DCA), 1,2-dibromomethane (EDB), and ethanol.

All analyses were conducted using USEPA Method 8260B.

2.4.1 Soil Analytical Results

During the current investigation, elevated PID readings and hydrocarbon odor and staining were observed primarily in borings DP-1 and DP-2, with moderate to slight PHC odor in borings DP-3 through DP-5. The maximum PID reading was recorded in boring DP-1 at 22 feet bgs (220 ppm).

TPH-g was detected above environmental screening levels (ESL) published by SB Bay Region RWQCB in DP-4 (located in the sidewalk area) at 24 feet bgs (140 mg/kg). TPH-g in all other soil samples was either below the laboratory-reporting limit or below ESL (83 mg/kg). Toluene was the only other contaminant of concern (COC), and was detected above ESL (2.9 mg/kg) in DP-1 at 20 feet bgs (2.94 mg/kg), and in DP-4 at 24 feet bgs (6.79 mg/kg). Figure 3 and Table 1 summarize soil sample analytical results.

It appears that vertical extent of soil contamination is limited to explored depths as illustrated by low to non-detectable levels, below laboratory-reporting limits, of COCs in deeper samples collected at the terminal depth of each boring. Although the lateral extent of soil contamination south of DP-4 has not been delineated, it should be noted that in DP-5, located approximately 25 feet southeast of DP-4, all COCs were detected below ESLs, suggesting that TPH-g concentrations are likely to decline to below ESLs in the area downgradient from DP-4.

2.4.2 Groundwater Analytical Results

TPH-g in grab groundwater samples from advanced soil borings ranged from 1,500 µg/L (DP-3) to 84,000 µg/L (DP-1). The contour map showing TPH-g concentrations in groundwater is shown in Figure 4. Maximum benzene concentration was detected in DP-5 at 290 µg/L; benzene was detected at 1.1 µg/L in DP-4, and was below the laboratory-detection limit in the other samples. The contour map showing benzene concentrations in groundwater is shown in Figure 5. Maximum MtBE and TBA were detected in DP-3 at 150 µg/L and 40 µg/L, respectively, and were below laboratory-detection limits in the other borings. The contour map showing MtBE concentrations in groundwater is shown in Figure 6. 1,2-DCA was above the laboratory-reporting limit, at 0.65 µg/L, in DP-4; note that 1,2-DCA was not detected during the latest groundwater monitoring event. Groundwater analytical results are shown in Table 2. The complete laboratory analytical report is in Appendix E.

The aforementioned figures also illustrate results of the most recent groundwater monitoring event at the site, during which maximum TPH-g was detected in on-site well MPE-1 at 49,000 µg/L. Historical groundwater analytical results are documented in Tables 3 and 4. Due to the turbidity of groundwater samples collected from advanced soil borings, their COC concentrations likely represent an overestimate of actual site contamination.

Grab groundwater sampling indicates that elevated COCs are found near, and downgradient of, MW-6. No free product was noted during boring advancement. Based on elevated COCs in DP-2, the off-site extent of dissolved contaminant plume west of DP-2 has not been delineated (Figure 4). Based on COC levels detected in downgradient boring DP-5, it could be concluded that the lateral extent of the TPH plume extends beyond this location. Note, however, that the most recent analytical data from former groundwater monitoring wells MW-8 and MW-9 (decommissioned on November 13, 2009), located downgradient from DP-2 and DP-5, respectively, exhibited non-detectable concentrations of all COCs, indicating that the contaminant plume had not moved beyond their location in 2009. Furthermore, based on relatively low concentrations in crossgradient boring DP-3 and well MW-7, the easterly extent of groundwater contamination has been delineated.

3. CONCLUSIONS AND RECOMMENDATIONS

In order to evaluate the extent of the off-site chemical plume and effectiveness of current site remediation, SOMA advanced soil borings DP-1 through DP-5 within the First WBZ to total depth of 30 feet bgs and collected soil and groundwater samples.

Results of soil analytical data indicate maximum TPH-g concentration of 140 mg/kg, detected in DP-4 at 24 feet bgs. Toluene was the only other COC detected above ESL, at 2.94 mg/kg in DP-1 at 20 feet bgs, and 6.79 mg/kg in DP-4 at 24 feet bgs. These relatively low COC detections in soil indicate that soil impact in the studied area is limited.

Results of groundwater analytical data show TPH-g in advanced soil borings ranging from 1,500 µg/L (DP-3) to 84,000 µg/L (DP-1). Maximum benzene was detected in DP-5 at 290 µg/L. Maximum MtBE and TBA were detected in DP-3 at 150 µg/L and 40 µg/L, respectively. These relatively high COC levels indicate that impacted groundwater still exists in the area of MW-6. As indicated by relatively low COC levels in groundwater extraction wells EX-1 and EX-2, the existing groundwater treatment system is effectively controlling the PHC plume as well as reducing COC concentrations in groundwater.

Results of this off-site soil and groundwater investigation indicate that contamination is mainly in groundwater, rather than in soil, in the vicinity of off-site groundwater extraction wells where the five borings of this investigation were advanced. Therefore, at this time SOMA recommends at the minimum connecting 4-inch well MW-6, screened from 12 to 27 feet bgs (boring log in Appendix C) via the subsurface trenching to the existing treatment system, in order to maximize the capture zone and capability of the existing groundwater extraction and treatment system to remove COCs.

FIGURES

N

approximate scale in feet

0 150 300

Figure 1: Site vicinity map.

SOMA ENVIRONMENTAL ENGINEERING, INC.

N

FREEDOM AVENUE

FAIRMONT DRIVE

INTERSTATE 580

MW-1D

MW-1

SB-4

DISPENSER ISLANDS

Former USTs

SB-1

MW-2

MW-3D

MW-3

SB-2

SB-3

MPE-2

Existing USTs

STATION BUILDING

151 st AVENUE

MW-4

DISPENSER ISLANDS

SB-5

MW-4D

MPE-1

MW-5

RESIDENTIAL AREA

rail

EX-1

~19'

DP-1

EX-2

MW-6

DP-2

DP-3

~5.5'

DP-4

DP-5

parking lane

152 nd AVENUE

parking lane

TWB-2

LIBERTY ST

MW-7

TWB-5

MW-9

MW-8

parking lane

RESIDENTIAL AREA

TWB-3

Soil Borings (2011)

Monitoring Wells Installed 12/07

Monitoring Wells

MPE wells installed in April 2009 and extraction wells installed in Nov 2009

Soil Borings drilled July 2001

Temporary Well Borehole Drilled by SOMA September 2003

approximate scale in feet

0 50 100

Figure 2: Site Map Showing Locations of USTs, Fuel Dispensers, Soil Borings, and Groundwater Monitoring Wells and Off-Site Soil Borings

SOMA ENVIRONMENTAL ENGINEERING, INC.

N

FREEDOM AVENUE

FAIRMONT DRIVE

INTERSTATE 580

MW-1D

MW-1

SB-4

DISPENSER ISLANDS

Former USTs

SB-1

MW-2

MW-3D

MW-3

SB-2

SB-3

MPE-2

Existing USTs

STATION BUILDING

MW-4

DISPENSER ISLANDS

SB-5

MW-4D

MPE-1

MW-5

151 st AVENUE

RESIDENTIAL AREA

rail

EX-1

22
<0.046
<0.046
0.65
2.94

EX-2

DP-1

MW-6

26
<0.0048
<0.0048
0.1
0.28

DP-3

4.4
<0.0049
<0.0049
<0.0049
<0.0049

DP-2

140
<0.25
<0.25
2.2
6.79

DP-4

67
<0.0047
<0.0047
1.6
1.8

DP-5

TWB-2

MW-7

LIBERTY ST

parking lane

152 nd AVENUE

parking lane

TWB-5

MW-9

parking lane

MW-8

RESIDENTIAL AREA

TWB-3

0.0 TPH-g Concentrations (mg/kg)
0.0 Benzene Concentrations (mg/kg)
0.0 Toluene Concentrations (mg/kg)
0.0 Ethylbenzene Concentrations (mg/kg)
0.0 Total Xylenes Concentrations (mg/kg)
< Less than laboratory reporting limit
Soil Borings (2011)
Monitoring Wells Installed 12/07
Monitoring Wells
MPE wells installed in April 2009 and extraction wells installed in Nov 2009
Soil Borings drilled July 2001
Temporary Well Borehole Drilled by SOMA September 2003

Note: Maximum concentrations between 20'-24' bgs were utilized

approximate scale in feet

0 50 100

Figure 3: Map Showing TPH-g and BTEX Concentrations in Soil (20 to 24 feet bgs)

SOMA ENVIRONMENTAL ENGINEERING, INC.

N

FREEDOM AVENUE

FAIRMONT DRIVE

INTERSTATE 580

151 st AVENUE

152 nd AVENUE

MW-1D

MW-1
9,500

SB-4

DISPENSER ISLANDS

Former USTs

SB-1

MW-2
310

MW-3D

SB-2

SB-3

MW-3
12,000

MPE-2
46,000

Existing USTs

STATION BUILDING

MW-4
1,800

DISPENSER ISLANDS

SB-5

MW-4D

MPE-1
49,000

MW-5
3,000

TPH-g
ug/L

84,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
50

RESIDENTIAL AREA

rail

EX-1
370

DP-1
84,000

EX-2
7,500

MW-6
14,000

DP-2
46,000

DP-3
1,500

DP-4
20,000

DP-5
80,000

parking lane

parking lane

parking lane

TWB-2

MW-7
810

LIBERTY ST

TWB-5

MW-9

MW-8

TWB-3

RESIDENTIAL AREA

Soil Borings (2011)

Monitoring Wells Installed 12/07

Monitoring Wells

MPE wells installed in April 2009 and extraction wells installed in Nov 2009

Soil Borings drilled July 2001

Temporary Well Borehole
Drilled by SOMA September 2003

< Less than laboratory reporting limit

Note: Concentrations from May 2011 through Aug 2011 sampling events

approximate scale in feet

0 50 100

Figure 4: Contour Map Showing TPH-g Concentrations in Groundwater

SOMA ENVIRONMENTAL ENGINEERING, INC.

N

FREEDOM AVENUE

FAIRMONT DRIVE

INTERSTATE 580

151 st AVENUE

152 nd AVENUE

Benzene
ug/L

2,100
1,800
1,600
1,400
1,200
1,000
800
600
400
200
0.5

RESIDENTIAL AREA

RESIDENTIAL AREA

MW-1D

MW-1
260

SB-4

DISPENSER ISLANDS

SB-1

Former USTs

MW-2
<0.5

MW-3D

SB-2

SB-3

MW-3
710

MPE-2
2,100

Existing USTs

STATION BUILDING

MW-4
27

DISPENSER ISLANDS

SB-5

MW-4D

MPE-1
210

MW-5
23

rail

EX-1
42

DP-1
<17

EX-2

260

MW-6
14

DP-3
<1.0

DP-2
<5.0

DP-4
1.1

DP-5
290

parking lane

parking lane

parking lane

TWB-2

LIBERTY ST

MW-7
<0.5

TWB-5

MW-9

MW-8

TWB-3

0.5

400

800

1,200

Soil Borings (2011)

Monitoring Wells Installed 12/07

Monitoring Wells

MPE wells installed in April 2009 and extraction wells installed in Nov 2009

Soil Borings drilled July 2001

Temporary Well Borehole
Drilled by SOMA September 2003

< Less than laboratory reporting limit

Note: Concentrations from May 2011 through Aug 2011 sampling events

approximate scale in feet

0 50 100

Figure 5: Contour Map Showing Benzene Concentrations in Groundwater

SOMA ENVIRONMENTAL ENGINEERING, INC.

N

FREEDOM AVENUE

FAIRMONT DRIVE

INTERSTATE 580

151 st AVENUE

MW-1D

MW-1
<3.6

SB-4

DISPENSER ISLANDS

SB-1

Former USTs

MW-2
<0.5

MW-3D

MW-3
11

SB-2

SB-3

MPE-2
75

Existing USTs

STATION BUILDING

MW-4
4.8

DISPENSER ISLANDS

SB-5

MW-4D

MPE-1
45

MW-5
5.4

MtBE
ug/L

150
135
120
105
90
75
60
45
30
15
0.5

RESIDENTIAL AREA

rail

EX-1
110

DP-1
<17

EX-2

MW-6
7.2

DP-3
150

11

DP-2
<5.0

DP-4
<0.5

DP-5
<25

TWB-2

MW-7
7.8

LIBERTY ST

parking lane

152 nd AVENUE

TWB-5

MW-9

MW-8

TWB-3

RESIDENTIAL AREA

Soil Borings (2011)

Monitoring Wells Installed 12/07

Monitoring Wells

MPE wells installed in April 2009 and extraction wells installed in Nov 2009

Soil Borings drilled July 2001

Temporary Well Borehole
Drilled by SOMA September 2003

< Less than laboratory reporting limit

Note: Concentrations from May 2011 through Aug 2011 sampling events

approximate scale in feet

0 50 100

Figure 6: Contour Map Showing MtBE Concentrations in Groundwater

SOMA ENVIRONMENTAL ENGINEERING, INC.

TABLES

Table 1
Soil Analytical Results
15101 Freedom Avenue
San Leandro, California

Sample ID	Depth (Feet)	Date	TPH-g (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Total Xylenes (mg/Kg)	MtBE (mg/Kg)	TBA (mg/Kg)	TAME (mg/Kg)	DIPE (mg/Kg)	ETBE (mg/Kg)	1,2-DCA (mg/Kg)	EDB (mg/Kg)
DP-1	**6.5**	**7/20/2011**	<1.1	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.096	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048
	16	**7/20/2011**	<0.91	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.094	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047
	20	**7/20/2011**	22	<0.046	<0.046	0.65	**2.94**	<0.046	<0.93	<0.046	<0.046	<0.046	<0.046	<0.046
	22	**7/20/2011**	5.7	<0.0048	0.0086	0.14	1.15	<0.0048	<0.096	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048
	23	**7/20/2011**	<1.0	<0.0048	<0.0048	0.01	0.0253	<0.0048	<0.097	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048
	30	**7/20/2011**	1.3	<0.0044	<0.0044	0.024	0.122	<0.0044	<0.088	<0.0044	<0.0044	<0.0044	<0.0044	<0.0044
DP-2	**8**	**7/20/2011**	<0.92	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.094	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047
	10	**7/20/2011**	<1.1	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.094	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047
	20	**7/20/2011**	<0.94	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.093	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046
	24	**7/20/2011**	4.4 Y	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.098	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049
	28	**7/20/2011**	<1.0	<0.0047	<0.0047	0.034	0.042	<0.0047	<0.095	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047
	30	**7/20/2011**	<0.92	<0.0047	<0.0047	0.0071	<0.0047	<0.0047	<0.094	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047
DP-3	**6**	**7/21/2011**	<1.0	<0.005	<0.005	<0.005	<0.005	<0.005	<0.099	<0.005	<0.005	<0.005	<0.005	<0.005
	12	**7/21/2011**	<1.1	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.096	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048
	20	**7/21/2011**	26 Y	<0.0048	<0.0048	0.1	0.28	<0.0048	<0.095	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048
	21	**7/21/2011**	<0.98	<0.0046	<0.0046	<0.0046	<0.0046	0.0051	<0.093	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046
	30	**7/21/2011**	<1.1	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.099	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049
DP-4	**8**	**7/21/2011**	<1.1	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.093	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046
	11	**7/21/2011**	<0.99	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.095	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048
	16	**7/21/2011**	<1.0	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.098	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049
	20	**7/21/2011**	5.2 Y	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.092	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046
	24	**7/21/2011**	**140**	<0.25	<0.25	2.2	**6.79**	<0.25	<5.0	<0.25	<0.25	<0.25	<0.25	<0.25
	26	**7/21/2011**	40	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.096	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048
	30	**7/21/2011**	<1.0	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.096	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048
DP-5	**7.5**	**7/20/2011**	<1.1	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.096	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048
	10.5	**7/20/2011**	<1.0	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.095	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047
	12.5	**7/20/2011**	<0.93	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.097	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048
	23	**7/20/2011**	67	<0.0047	<0.0047	1.6	1.8	<0.0047	<0.093	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047
	28	**7/20/2011**	<0.96	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.093	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046
	30	**7/20/2011**	<0.96	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.098	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049
ESLs (mg/Kg)		**Residential**	**83.0**	**0.044**	**3.3**	**2.3**	**2.9**	**0.023**	**NA**	**NA**	**NA**	**NA**	**0.0045**	**0.00033**
		Commercial	**83.0**	**0.044**	**3.3**	**2.3**	**2.9**	**0.023**	**NA**	**NA**	**NA**	**NA**	**0.0045**	**0.00033**

Notes:

ESLs Environmental Screening levels as per SF Bay Region RWQCB-Interim Final November 2007, revised May 2008
(Table C. Deep Soils (>3m bgs) Groundwater is a Current or Potential Source of Drinking Water)

NA Not listed on the ESL Tables

<: Below laboratory detection limits

Table 2
Groundwater Analytical Results
15101 Freedom Avenue
San Leandro, California

Sample ID	Date	TPH-g (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	MtBE (ug/L)	TBA (ug/L)	TAME (ug/L)	DIPE (ug/L)	ETBE (ug/L)	1,2-DCA (ug/L)	EDB (ug/L)
DP-1	7/20/2011	**84,000**	<17	**250**	**3,600**	**15,300**	<17	<330	<17	<17	<17	<17	<17
DP-2	7/20/2011	**46,000**	<5.0	<5.0	**540**	**1,130**	<5.0	<100	<5.0	<5.0	<5.0	<5.0	<5.0
DP-3	7/21/2011	**1,500**	<1.0	<1.0	**42**	**120**	**150**	**40**	8.9	<1.0	<1.0	<1.0	<1.0
DP-4	7/21/2011	**20,000**	**1.1**	0.98	**1,100**	**1,670**	<0.5	<10	<0.5	<0.5	<0.5	**0.65**	<0.5
DP-5	7/20/2011	**80,000**	**290**	**140**	**4,300**	**16,800**	<25	<500	<25	<25	<25	<25	<25
ESLs		**100**	**1**	**40**	**30**	**20**	**5**	**12.0**	**NA**	**NA**	**NA**	**0.5**	**0.05**

Notes:

ESLs Environmental Screening levels as per SF Bay Region RWQCB-Interim Final November 2007, revised May 2008
(Table F1a. Groundwater is a Current or Potential Source of Drinking Water)

NA Not listed on the ESL Tables

Table 3

Historical Groundwater Elevation Data and Analytical Results

15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Casing Elevation [1] (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B [2] (µg/L)
1st WBZ										
MW-1	5/10/2002	51.71	22.85	28.86	5,700	360	4.5	340	450	2
	8/8/2002	51.71	23.31	28.40	9,100	590	2.6	830	362	<1.3
	11/8/2002	51.71	23.58	28.13	7,900	570	3.1	680	392	< 1.0
	2/21/2003	51.71	22.62	29.09	2,900	160	1.6 C	170	211	<0.5
	5/28/2003	51.71	22.43	29.28	1,700	55	<0.5	90	115	2.00
	8/12/2003	51.71	21.30	30.41	2,600	2.5	<0.5	190	130	<0.5
	10/9/2003	51.71	23.49	28.22	9,200	560.0	2.7 C	670	648	<1.0
	1/15/2004	51.71	22.43	29.28	5,500	190	<1.0	220	124.4	<0.5
	5/25/2004	51.71	22.94	28.77	8,000	400	1.50	420	393	3.40
	9/21/2004	54.46	23.49	30.97	9,300	580	9.30	690	683	4.60
	12/14/2004	54.46	23.01	31.45	7,360	337	<4.3	731	633	<4.3
	3/11/2005	54.46	21.48	32.98	2,510	45.2	<0.5	23.2	39.63	2.80
	6/15/2005	54.46	22.42	32.04	1,690	36.3	<2.0	59.5	28.73	2.01
	8/26/2005	54.46	23.00	31.46	7,310	318	<8.60	475	316	5.15
	11/11/2005	54.46	21.40	33.06	9,640	341	<8.6	467	329.7	6.04
	2/9/2006	54.46	21.81	32.65	775	14	<2.0	12.6	10.32	4.01
	5/9/2006	54.46	21.68	32.78	444	7.80	<2.0	12.1	6.31	1.75
	8/10/2006	54.46	22.79	31.67	5,090	324	<8.60	108	59.9	8.24
	10/26/2006	54.46	23.19	31.27	6,950	556	<4.0	190	136.09	8.61
	1/25/2007	54.46	22.82	31.64	2,640	196	<2.0	105	25.5	7.92
	4/26/2007	54.46	22.67	31.79	861	95.5	<2.0	17	6.36	4.00
	7/25/2007	54.46	23.25	31.21	4,520	412	<4.0	182	77.9	7.48
	10/23/2007	54.46	23.42	31.04	3,900	117	<2.0	87.1	23.87	4.54

Table 3

Historical Groundwater Elevation Data and Analytical Results

15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Casing Elevation [1] (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B [2] (µg/L)
MW-1 cont	1/22/2008	54.46	22.59	31.87	2,260	81.3	<2.0	17.5	<2.0	4.23
	4/16/2008	54.46	22.89	31.57	2,320	248	<2.0	54.1	37.3	<0.5
	7/3/2008	54.46	23.33	31.13	5,240	414	<2.0	168	94	6.56
	10/15/2008	54.46	23.76	30.70	4,500 Y	260	<1.0	150	130	3.40
	1/7/2009	54.46	23.25	31.21	4,800	140	<1.3	48	32	1.70
	4/14/2009	54.46	22.52	31.94	1,800 Y	78	<0.5	35	18	2.50
	8/27/2009	54.46	23.6	30.86	4,500	330	<2.0	97	42	4.60
	12/2/2009	54.46	23.43	31.03	3,800 Y	250	<2.0	110	25	2.50
	3/17/2010	54.46	22.32	32.14	1,100	33	<0.50	46	18	1.70
	6/3/2010	54.46	22.88	31.58	10,000	330	4.3	680	841.5	5.20
	9/2/2010	54.46	23.28	31.18	8,900	440	<5.0	510	310	<5.0
	12/2/2010	54.46	23.21	31.25	7,400	250	<3.1	390	180	<3.1
	3/4/2011	54.46	21.95	32.51	2,400	67	<0.5	45	8.4	2.20
	5/20/2011	**54.46**	**22.8**	**31.66**	**9,500**	**260**	**6.2**	**970**	**480**	**<3.6**
MW-2	5/10/2002	49.66	22.83	26.83 *	3,100	67	8	250	215	56
	8/8/2002	49.66	21.41	28.25	2,700	4.6	<0.5	310	140	<0.5
	11/8/2002	49.66	21.79	27.87	3,400	4.6	< 0.5	310	160	< 0.5
	2/21/2003	49.66	20.51	29.15	890	1.7 C	0.80 C	68	38.92 C	<0.5
	5/28/2003	49.66	20.33	29.33	2,700	5.2 C	<0.5	120	140	1.2
	8/12/2003	49.66	23.18	26.48*	8,500	640	<2.5	560	659	<0.8
	10/9/2003	49.66	21.71	27.95	3100 H	4.3 C	<0.5	210	160	<0.5
	1/15/2004	49.66	20.31	29.35	660 H	1.5 C	<0.5	8.9	25	<0.5
	5/25/2004	49.66	21.09	28.57	4,500	5.1 C	<0.5	190	230	0.70
	9/21/2004	52.41	21.71	30.70	370	0.76 C	<0.5	25	16	0.50
	12/14/2004	52.41	21.20	31.21	880	1.0	<0.5	66	52	<0.5

Table 3

Historical Groundwater Elevation Data and Analytical Results

15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Casing Elevation [1] (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B [2] (µg/L)
MW-2 cont.	3/11/2005	52.41	19.15	33.26	564	<0.5	<0.5	21	11.9	<0.5
	6/15/2005	52.41	20.30	32.11	2,040	1.2	<2.0	78.2	22	<0.5
	8/26/2005	52.41	20.97	31.44	1,500	0.930	<2.00	87.6	21	0.86
	11/11/2005	52.41	25.30	27.11	2,140	1.08	<2.0	104	29	0.79
	2/9/2006	52.41	19.41	33.00	1,410	<0.5	<2.0	99.6	21.4	0.72
	5/9/2006	52.41	19.41	33.00	1,100	<0.5	<2.0	86.5	17	<0.5
	8/10/2006	52.41	20.8	31.61	3,180	2.87	<2.0	88.9	24.8	<0.50
	10/26/2006	52.41	21.22	31.19	1,200	<0.5	<2.0	23.5	4.79	0.6
	1/25/2007	52.41	20.89	31.52	623	0.64	<2.0	42.4	4.37	0.66
	4/26/2007	52.41	20.65	31.76	169	<0.5	<2.0	15.2	2.3	<0.5
	7/25/2007	52.41	21.43	30.98	276	0.78	<2.0	22.1	4.04	<0.5
	10/23/2007	52.41	21.59	30.82	535	<0.5	<2.0	18	5.11	<0.5
	1/22/2008	52.31	20.45	31.86	132	<0.5	<2.0	12.2	<2.0	<0.5
	4/15/2008	52.41	20.89	31.52	852	<0.5	<2.0	27.2	4.78	<0.5
	7/2/2008	52.41	21.5	30.91	98.3	<0.5	<2.0	2.76	<2.0	<0.5
	10/15/2008	52.41	22.06	30.35	1,400 [Y]	<0.5	<0.5	60	17	<0.5
	1/7/2009	52.41	21.35	31.06	93	<0.5	<0.5	2.1	0.74	<0.5
	4/13/2009	52.41	20.52	31.89	480 [Y]	<0.5	<0.5	20	5.5	<0.5
	8/27/2009	52.41	21.85	30.56	130	<0.5	<0.5	2.5	0.61	<0.5
	12/1/2009	52.41	21.59	30.82	760 [Y]	<0.5	<0.5	14	1.5	<0.5
	3/17/2010	52.41	20.11	32.30	480	<0.5	<0.5	30	6.9	<0.5
	6/3/2010	52.41	21	31.41	690	<0.5	<0.5	14	2.6	<0.5
	9/2/2010	52.41	21.42	30.99	470	<0.5	<0.5	7.6	1	<0.5
	12/2/2010	52.41	21.44	30.97	470	<0.5	<0.5	7.6	3.3	<0.5
	3/4/2011	52.41	19.65	32.76	240	<0.5	<0.5	6.6	0.8	<0.5
	5/20/2011	**52.41**	**20.75**	**31.66**	**310**	**<0.5**	**<0.5**	**4.8**	**<0.5**	**<0.5**

Table 3

Historical Groundwater Elevation Data and Analytical Results

15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Casing Elevation [1] (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B [2] (µg/L)
MW-3	5/10/2002	51.16	22.28	28.88	44,000	6,000	900	1,500	6,200	2,400
	8/8/2002	51.16	22.88	28.28	40,000	5,800	1,100	1,600	6,500	1,300
	11/8/2002	51.16	23.19	27.97	47,000	5,300	1,200	2,200	8,600	1,000
	2/21/2003	51.16	22.02	29.14	39,000	5,500	1,500	2,000	8,600	1,300
	5/28/2003	51.16	21.89	29.27	52,000	7,300	3,000	2,800	12,700	2,100
	8/12/2003	51.16	22.66	28.50	31,000	6,100	860	1,500	6,900	1,200
	10/9/2003	51.16	23.06	28.10	41,000	6,100	1,100	2,200	10,200	960
	1/15/2004	51.16	21.85	29.31	51,000	4,100	1,100	2,000	8,400	590
	5/25/2004	51.16	22.55	28.61	65,000	4,300	1,300	2,500	10,500	720
	9/21/2004	53.91	23.08	30.83	42,000	4,900	890	2,200	8,700	480
	12/14/2004	53.91	22.52	31.39	35,151	4,066	972	2,942	13,032	491
	3/11/2005	53.91	20.90	33.01	42,600	3,040	1,100	1,530	6,670	968
	6/15/2005	53.91	21.85	32.06	84,100	5,110	2,160	3,030	8,800	2,670
	8/26/2005	53.91	22.49	31.42	43,500	3,630	1,080	2,500	6,830	1,440
	11/11/2005	53.91	22.81	31.10	47,700	4,240	520	2,170	6,320	1,390
	2/9/2006	53.91	21.12	32.79	44,500	5,070	1360	1,920	4,840	3,280
	5/9/2006	53.91	21.09	32.82	48,100	2,510	1,140	1,950	5,030	2,210
	8/10/2006	53.91	22.26	31.65	42,100	3,450	869	1,760	5,650	3,570
	10/26/2006	53.91	22.73	31.18	33,400	4,800	331	1,170	3,510	4,790
	1/25/2007	53.91	22.34	31.57	19,300	4,820	167	1,540	3,740	3,430
	4/26/2007	53.91	22.24	31.67	30,700	2,350	158	1,470	4,320	1,330
	7/25/2007	53.91	22.83	31.08	34,900	5,400	364	2,080	6,360	1,980
	10/23/2007	53.91	23.01	30.9	22,600	4,070	<86	1,120	3,095	970

Table 3

Historical Groundwater Elevation Data and Analytical Results

15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Casing Elevation [1] (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B [2] (µg/L)
MW-3 cont.	1/22/2008	53.96	22.04	31.92	22,100	1,280	453	1,330	3,520	490
	4/16/2008	53.91	22.4	31.51	20,700	2,790	182	860	3,389	263
	7/3/2008	53.91	22.9	31.01	48,500	3,760	346	3,130	12,980	573
	10/16/2008	53.91	23.36	30.55	50,000	3,900	300	3,100	11,000	460
	1/8/2009	53.91	22.82	31.09	54,000	2,600	180	2,500	8,800	220
	4/13/2009	53.91	22.06	31.85	49,000	2,900	170	2,100	8,100	490
	8/27/2009	53.91	23.11	30.80	43,000	2,500	160	1,900	7,000	210
	12/2/2009	53.91	23.00	30.91	30,000	2,100	180	1,600	5,600	91
	3/17/2010	53.91	21.90	32.01	24,000	970	81	1,100	3,700	38
	6/3/2010	53.91	22.49	31.42	31,000	1,200	110	1,300	4,400	34
	9/2/2010	53.91	22.76	31.15	26,000	1,100	81	1,200	3,810	26
	12/2/2010	53.91	22.86	31.05	18,000	830	47	780	2,360	14
	3/4/2011	53.91	21.44	32.47	18,000	410	32	850	2,480	16
	5/20/21011	**53.91**	**22.36**	**31.55**	**12,000**	**710**	**24**	**620**	**1,460**	**11**
MW-4	5/10/2002	50.54	21.78	28.76	880	25	1.0C	110	52	12,000
	8/8/2002	50.54	22.50	28.04	3,800	70	<5.0	300	115	4,800
	11/8/2002	50.54	22.81	27.73	5,100	150	10	460	258	2,400
	2/21/2003	50.54	21.48	29.06	3,200	98	66	220	360	6,600
	5/28/2003	50.54	21.24	29.30	6,200	140	46	200	790	2,300
	8/12/2003	50.54	22.32	28.22	7,500	180	57	220	1450	1,900
	10/9/2003	50.54	22.74	27.80	5,800	250	32	300	970	7,800
	1/15/2004	50.54	21.19	29.35	5,900	270	17 C	150	640	7,300
	5/25/2004	50.54	22.03	28.51	9,100	210	51	200	1190	1800
	9/21/2004	53.31	22.76	30.55	5,200	290	12	370	600	7300
	12/14/2004	53.31	21.99	31.32	8,937	538	114	416	2379	5021

Table 3

Historical Groundwater Elevation Data and Analytical Results

15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Casing Elevation [1] (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B [2] (µg/L)
MW-4 cont.	3/11/2005	53.31	20.01	33.30	12,300	225	39.6	80.1	1465	3870
	6/15/2005	53.31	21.25	32.06	7,690	114	32.6	77.1	555	1150
	8/26/2005	53.31	22.03	31.28	8,850	175	24.6	150	851	1380
	11/11/2005	53.31	22.43	30.88	9,990	356	<43	196	700	3,640
	2/9/2006	53.31	20.31	33.00	6,850	205	<43	67.2	255.2	5,120
	5/9/2006	53.31	20.33	32.98	1,290	18.1	<8.6	12.9	25.87	799
	8/10/2006	53.31	21.74	31.57	7,830	118	<8.60	25.3	174.6	919
	10/26/2006	53.31	22.29	31.02	1,540	81.9	<43	96	46.4	3,610
	1/25/2007	53.31	21.86	31.45	4,370	163	<8.6	85.1	269.1	1,050
	4/26/2007	53.31	21.63	31.68	4,380	140	<8.6	67	276.8	576
	7/25/2007	53.31	22.49	30.82	4,970	220	<8.60	198	241.5	1,040
	10/23/2007	53.31	22.69	30.62	4,200	267	<8.6	147	155.5	1,220
	1/22/2008	53.36	21.39	31.97	2,180	133	<22.0	43.1	32.2	1,800
	4/15/2008	53.31	21.9	31.41	4,240	90.4	<22.0	107	380	674
	7/2/2008	53.31	22.55	30.76	2,300	193	<22.0	212	183	4,050
	10/16/2008	53.31	23.13	30.18	8,900	320	3.7	430	1,160	450
	1/8/2009	53.31	22.42	30.89	19,000	430	44	590	3,380	440
	4/13/2009	53.31	21.51	31.80	21,000	400	38	450	2,880	330
	8/27/2009	53.31	22.94	30.37	16,000	960	64	560	2,120	290
	12/2/2009	53.31	22.36	30.95	4,400	480	6	170	640	110
	3/17/2010	53.31	21.39	31.92	14,000	260	6	230	1,220	93
	6/3/2010	53.31	22.23	31.08	18,000	240	4	310	770	41
	9/2/2010	53.31	22.51	30.80	1,800	800	<3.6	150	25	33
	12/2/2010	53.31	22.71	30.60	3,800	1,500	<10	200	115	29
	3/3/2011	53.31	20.64	32.67	2,400	28	<0.71	28	17	3
	5/19/2011	**53.31**	**21.84**	**31.47**	**1,800**	**27**	**<0.5**	**29**	**11.2**	**4.8**

Table 3

Historical Groundwater Elevation Data and Analytical Results

15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Casing Elevation [1] (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B [2] (µg/L)
MW-5	5/10/2002	47.79	19.02	28.77	25,000	1,000	1200	1,100	3,060	1,800
	8/8/2002	47.79	19.80	27.99	18,000	1,000	660	950	1,720	1,500
	11/8/2002	47.79	20.14	27.65	16,000	1,300	380	930	1,550	1,200
	2/21/2003	47.79	18.70	29.09	12,000	390	71	770	1,100	860
	5/28/2003	47.79	18.52	29.27	9,100	210	31	560	790	600
	8/12/2003	47.79	19.54	28.25	12,000	660	75	660	1,110	1,000
	10/9/2003	47.79	20.06	27.73	15,000	1,000	130	1,000	1,430	1,700
	1/15/2004	47.79	18.42	29.37	9,900	450 C	16	500	431	1,100
	5/25/2004	47.79	19.30	28.49	9,200	380	24	490	536	720
	9/21/2004	50.53	20.15	30.38	10,000	980	71	560	770	1200
	12/14/2004	50.53	19.30	31.23	10,502	587	64	1040	1133	1015
	3/11/2005	50.53	17.20	33.33	8,390	407	<5.5	83	42.5	1530
	6/15/2005	50.53	18.54	31.99	9,350	147	18.3	435	146.2	573
	8/26/2005	50.53	19.31	31.22	9,500	261	<22	726	321.3	749
	11/11/2005	50.53	19.75	30.78	10,000	443	41.5	527	278.5	1,430
	2/9/2006	50.53	17.58	32.95	7,640	237	<22	187	50.2	2,050
	5/9/2006	50.53	17.54	32.99	8,360	111	<8.6	300	75.84	566
	8/10/2006	50.53	19.02	31.51	16,100	250	<22	455	187.4	1,590
	10/26/2006	50.53	19.61	30.92	10,100	430	<22	375	192.6	3,060
	1/25/2007	50.53	19.19	31.34	3,960	340	<22	323	150.1	1,740
	4/26/2007	50.53	18.89	31.64	4,590	187	<8.6	307	116.5	861
	7/25/2007	50.53	19.81	30.72	6,490	419	21.8	413	223.2	913
	10/23/2007	50.53	19.98	30.55	6,120	550	11	284	141.4	433

Table 3

Historical Groundwater Elevation Data and Analytical Results

15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Casing Elevation [1] (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B [2] (µg/L)
MW-5 cont.	1/22/2008	50.18	18.69	31.49	9,810	572	22	574	184.1	126
	4/15/2008	50.18	19.16	31.02	8,890	335	15.1	477	397.5	136
	7/3/2008	50.53	19.88	30.65	13,100	949	34.4	875	825.5	176
	10/16/2008	50.53	20.45	30.08	11,000	870	25	820	668	160
	1/8/2009	50.53	19.72	30.81	12,000	490	21	690	456	76
	4/13/2009	50.53	18.81	31.72	9,000 [Y]	200	11	390	198	44
	8/27/2009	50.53	21.30	29.23	7,400	610	15	320	185	66
	12/2/2009	50.53	20.00	30.53	8,400 [Y]	400	12	540	296	45
	3/17/2010	50.53	18.73	31.80	4,800	120	8.7	120	107	14
	6/4/2010	50.53	19.60	30.93	7,200	160	5.7	190	149.2	24
	9/2/2010	50.53	19.82	30.71	9,200	110	12	270	318	35
	12/2/2010	50.53	20.10	30.43	9,100	170	6.7	350	442	23
	3/4/2011	50.53	18.00	32.53	2,600	18	0.62	54	18.1	3
	5/20/2011	50.53	19.18	31.35	4,000	91	8.5	110	106	33
pre-MPE	**8/4/2011**	**50.53**	**NM**	**NC**	**3,000**	**23**	**0.95**	**92**	**43.7**	**5.4**
MW-6	9/21/2004	45.82	17.64	28.18	34,000	150	130	2200	8100	0.6
	12/14/2004	45.82	15.75	30.07	5,161	137	7	436	1136	<5.5
	3/11/2005	45.82	13.80	32.02	6,040	125	3.22	260	722.1	4.94
	6/15/2005	45.82	14.78	31.04	5,590	44.3	6.60	272	382	5.85
	8/26/2005	45.82	15.91	29.91	6,130	99	<8.6	378	492.9	5.66
	11/11/2005	45.82	16.55	29.27	11,400	101	<8.6	645	834.7	4.33
	2/9/2006	45.82	13.92	31.90	2,790	32.3	<8.6	131	131.22	7.30
	5/9/2006	45.82	13.95	31.87	3,730	25	<2.0	213	207.82	5.87
	8/10/2006	45.82	15.28	30.54	4,800	41.9	<2.0	201	189	10.4
	10/26/2006	45.82	16.11	29.71	6,080	37.4	<2.0	116	183	9.78

Table 3

Historical Groundwater Elevation Data and Analytical Results

15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Casing Elevation [1] (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B [2] (µg/L)
MW-6 cont.	1/25/2007	45.82	15.76	30.06	3,220	25.2	<2.0	219	174	14.7
	4/26/2007	45.82	15.18	30.64	3,110	28	<2.0	165	138.47	14.6
	7/25/2007	45.82	16.82	29.00	4,960	54.1	<2.0	199	255.87	8.05
	10/23/2007	45.82	16.91	28.91	9,610	64.3	<2.0	188	302.6	5.81
	1/21/2008	45.82	15.36	30.46	3,290	33	<2.0	149	131.31	3.86
	4/15/2008	45.82	15.73	30.09	2,070	10.8	<2.0	51.1	67	<0.5
	7/2/2008	45.82	16.9	28.92	7,900	42.4	<2.0	194	296	3.58
	10/15/2008	45.82	17.21	28.61	18,000 [Y]	42	1.4	320	673	1.7
	1/7/2009	45.82	17.08	28.74	13,000	47	<3.1	210	425	<3.1
	4/13/2009	45.82	15.52	30.30	7,200 [Y]	26	<1.3	170	312.6	2.6
	8/26/2009	45.82	17.82	28.00	10,000 [Y]	25	<2.0	130	294	2.2
	12/1/2009	45.82	17.34	28.48	11,000 [Y]	31	6.1	220	539	<2.0
	3/16/2010	45.82	14.81	31.01	31,000	63	140	970	4,200	64
	6/3/2010	45.82	15.72	30.10	27,000	22	67	840	3,100	32
	9/1/2010	45.82	16.86	28.96	33,000	24	34	1,100	3,780	12
	12/2/2010	45.82	16.98	28.84	70,000	32	55	1,700	5,670	18
	3/3/2011	45.82	14.35	31.47	7,000	18	<2.5	97	237	11
	5/20/2011	**45.82**	**14.95**	**30.87**	**14,000**	**14**	**<2.5**	**300**	**823**	**7.2**
MW-7	9/21/2004	44.74	15.21	29.53	2,900	<0.5	<0.5	52	61	8.1
	12/14/2004	44.74	13.90	30.84	<50	1.6	<0.5	29	58	6.0
	3/11/2005	44.74	11.46	33.28	2,230	<2.5	<2.5	39.4	51.4	12.4
	6/15/2005	44.74	12.97	31.77	2,940	0.85	<2.0	50.6	31.9	13.7
	8/26/2005	44.74	14.10	30.64	2,310	<0.50	<2.0	55.7	29.6	4.01
	11/11/2005	44.74	14.59	30.15	3,030	<0.5	<2.0	66.5	42.3	9.76

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Monitoring Well	Date	Casing Elevation [1] (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B [2] (µg/L)
MW-7 cont.	2/9/2006	44.74	NM	NM	NA	NA	NA	NA	NA	NA
	5/9/2006	44.74	12.02	32.72	1,400	<0.5	<2.0	19.8	12.4	2.30
	8/10/2006	44.74	13.72	31.02	604	<0.50	<2.0	6.2	4.63	1.42
	10/26/2006	44.74	14.38	30.36	1350	<0.50	<2.0	16.6	10.8	1.87
	1/25/2007	44.74	13.93	30.81	340	<0.5	<2.0	6.84	2.44	1.63
	4/26/2007	44.74	14.44	30.30	552	<0.5	<2.0	11.4	6.11	4.12
	7/25/2007	44.74	14.79	29.95	1,230	<0.5	<2.0	27	19.24	3.2
	10/23/2007	44.74	14.88	29.86	1,730	0.67	<2.0	20.7	17.31	8.44
	1/21/2008	44.74	13.34	31.40	610	1.15	<2.0	8.4	4.34	17.2
	4/15/2008	44.74	13.91	30.83	1,460	<0.5	<2.0	15.9	19.7	17.3
	7/2/2008	44.74	14.87	29.87	1,450	<0.5	<2.0	11	6.8	22.1
	10/15/2008	44.74	15.68	29.06	1,900 [Y]	0.56	1.2	27	39.5	55
	1/7/2009	44.74	14.72	30.02	2,700	1.2	2.9	11	25	39
	4/13/2009	44.74	13.54	31.20	2,300 [Y]	<0.5	<0.5	15	6.3	63
	8/26/2009	44.74	15.84	28.90	2,700 [Y]	<0.5	<0.5	48	53	140
	12/1/2009	44.74	15.03	29.71	1,800 [Y]	<0.5	<0.5	22	15	120
	3/16/2010	44.74	12.56	32.18	1,100	<0.5	<0.5	3.2	1.4	65
	6/3/2010	44.74	13.80	30.94	740	<0.5	<0.5	1.8	0.62	28
	9/1/2010	44.74	14.84	29.90	1,200	<0.5	<0.5	10	3.2	29
	12/2/2010	44.74	14.74	30.00	1,400	<0.5	<0.5	8	0.74	21
	3/3/2011	44.74	13.31	31.43	1,000	<0.5	<0.5	1.8	<0.5	16
	5/19/2011	**44.74**	**13.43**	**31.31**	**810**	**<0.5**	**<0.5**	**2.2**	**0.79**	**7.8**
MW-8	9/21/2004	41.14	12.98	28.16	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	12/14/2004	41.14	11.22	29.92	<50	<0.5	<0.5	<0.5	<1.0	<0.5

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Monitoring Well	Date	Casing Elevation [1] (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B [2] (µg/L)
MW-8 cont.	3/11/2005	41.14	NM	NM	NA	NA	NA	NA	NA	NA
	6/15/2005	41.14	10.46	30.68	<200	0.53	<2.0	<0.5	<1.0	<0.5
	8/26/2005	41.14	11.53	29.61	<50	<0.50	<2.0	<0.50	<1.0	<0.50
	11/11/2005	41.14	11.92	29.22	<50	<0.5	<2.0	1.36	1.8	<0.5
	2/9/2006	41.14	9.74	31.40	<50	<0.50	<2.0	<0.50	<1.0	<0.50
	5/9/2006	41.14	9.90	31.24	<50	<0.50	<2.0	<0.50	<1.0	<0.50
	8/10/2006	41.14	10.9	30.24	<50	<0.50	<2.0	<0.50	<1.0	<0.50
	10/26/2006	41.14	11.68	29.46	<50	<0.50	<2.0	3.37	<1.0	<0.50
	1/25/2007	41.14	11.44	29.70	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	4/26/2007	41.14	10.81	30.33	<50	<0.5	<2.0	4.29	<2.0	<0.5
	7/25/2007	41.14	12.31	28.83	<50	<0.5	<2.0	4.39	<2.0	<0.5
	10/23/2007	41.14	12.37	28.77	<50	<0.5	<2.0	4.31	<2.0	<0.5
	1/21/2008	41.14	11.02	30.12	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	4/15/2008	41.14	11.44	29.70	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	7/2/2008	41.14	12.39	28.75	94.8	<0.5	<2.0	1	<2.0	<0.5
	10/15/2008	41.14	13.42	27.72	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	1/7/2009	41.14	12.50	28.64	<50	<0.5	<0.5	<0.5	0.6	<0.5
	4/13/2009	41.14	11.23	29.91	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	8/27/2009	41.14	13.24	27.90	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	Well Decommissioned 11/13/2009									
MW-9	9/21/2004	40.26	12.18	28.08	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	12/14/2004	40.26	10.91	29.35	<50	<0.5	<0.5	<0.5	<1.0	<0.5

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Monitoring Well	Date	Casing Elevation [1] (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B [2] (µg/L)
MW-9 cont.	3/11/2005	40.26	10.52	29.74	<200	<0.5	<0.5	<0.5	<1.0	<0.5
	6/15/2005	40.26	14.73	25.53	<200	<0.5	<2.0	<0.5	<1.0	<0.5
	8/26/2005	40.26	10.59	29.67	<50	<0.50	<2.0	<0.50	<1.0	<0.50
	11/11/2005	40.26	11.25	29.01	<50	<0.5	<2.0	<0.5	<1.0	<0.5
	2/9/2006	40.26	10.05	30.21	<50	<0.50	<2.0	<0.50	<1.0	<0.50
	5/9/2006	40.26	9.06	31.20	<50	<0.50	<2.0	<0.50	<1.0	<0.50
	8/10/2006	40.26	10.01	30.25	<50	<0.50	<2.0	<0.50	<1.0	<0.50
	10/26/2006	40.26	10.81	29.45	<50	<0.50	<2.0	<0.50	<1.0	<0.50
	1/25/2007	40.26	10.67	29.59	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	4/26/2007	40.26	10.05	30.21	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	7/25/2007	40.26	11.44	28.82	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	10/23/2007	40.26	11.59	28.67	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	1/21/2008	40.26	10.37	29.89	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	4/15/2008	40.26	10.56	29.70	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	7/2/2008	40.26	11.95	28.31	161	<0.5	<2.0	2.15	<2.0	<0.5
	10/15/2008	40.26	12.64	27.62	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	1/7/2009	40.26	11.75	28.51	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	4/13/2009	40.26	10.89	29.37	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	8/26/2009	40.26	12.50	27.76	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	Well Decommissioned 11/13/2009									

Table 3

Historical Groundwater Elevation Data and Analytical Results

15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Casing Elevation [1] (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B [2] (µg/L)
Extraction Wells										
EX-1	12/2/2009	47.36	17.02	30.34	2,900	120	4	64	410	25
	3/16/2010	47.36	19.08	28.28	2,200	150	18	94	326	210
	6/3/2010	47.36	17.02	30.34	3,600	180	6.3	150	428	83
	9/1/2010	47.36	16.88	30.48	550	6.5	0.5	6.9	31.7	38
	12/2/2010	47.36	19.84	27.52	<200	3.1	<2.0	<2.0	<2.0	210
	3/3/2011	47.36	14.96	32.4	530	51	0.94	15	31.3	110
	5/19/2011	**47.36**	**16.12**	**31.24**	**370**	**42**	**<0.71**	**7.6**	**17.2**	**110**
EX-2	12/2/2009	45.96	17.56	28.4	7,100 [Y]	9.3	3.2	440	770	<3.1
	3/16/2010	45.96	19.65	26.31	13,000	600	360	770	2,250	15
	6/3/2010	45.96	17.10	28.86	16,000	590	400	700	2,500	9.5
	9/1/2010	45.96	16.99	28.97	6,100	230	74	200	890	11
	12/2/2010	45.96	20.87	25.09	14,000	510	270	640	2,170	15
	3/3/2011	45.96	14.61	31.35	8,600	340	52	460	1,350	13
	5/19/2011	**45.96**	**15.08**	**30.88**	**7,500**	**260**	**65**	**390**	**1,080**	**11**
MPE Wells										
MPE-1	12/1/2009	51.96	21.41	30.55	NA	NA	NA	NA	NA	NA
	3/16/2010	51.96	20.22	31.74	NA	NA	NA	NA	NA	NA
	6/3/2010	51.96	21.18	30.78	NA	NA	NA	NA	NA	NA
	9/1/2010	51.96	21.25	30.71	NA	NA	NA	NA	NA	NA
	12/2/2010	51.96	21.64	30.32	NA	NA	NA	NA	NA	NA
	3/3/2011	51.96	19.33	32.63	NA	NA	NA	NA	NA	NA
	5/19/2011	51.96	20.6	31.36	NA	NA	NA	NA	NA	NA
pre-MPE	**8/4/2011**	**51.96**	**NM**	**NC**	**49,000**	**210**	**100**	**840**	**7070**	**45**
MPE-2	12/1/2009	53.72	22.87	30.85	NA	NA	NA	NA	NA	NA

Table 3

Historical Groundwater Elevation Data and Analytical Results

15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Casing Elevation [1] (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B [2] (µg/L)
MPE-2 cont.	3/16/2010	53.72	21.7	32.02	NA	NA	NA	NA	NA	NA
	6/3/2010	53.72	22.35	31.37	NA	NA	NA	NA	NA	NA
	9/1/2010	53.72	23.7	30.02	NA	NA	NA	NA	NA	NA
	12/2/2010	53.72	22.7	31.02	NA	NA	NA	NA	NA	NA
	3/3/2011	53.72	21.25	32.47	NA	NA	NA	NA	NA	NA
	5/19/2011	53.72	22.19	31.53	NA	NA	NA	NA	NA	NA
pre-MPE	**8/4/2011**	**53.72**	**NM**	**NC**	**46,000**	**2,100**	**80**	**1,900**	**5,300**	**75**
2nd WBZ										
MW-1D	1/3/2008	54.42		-	<50	<0.50	<2.0	<0.50	<2.0	<0.50
	1/22/2008	54.42	22.85	31.57	<50	<0.50	<2.0	<0.50	<2.0	<0.50
	4/16/2008	54.42	23.10	31.32	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	7/3/2008	54.42	23.44	30.98	75.9	<0.5	<2.0	0.54	<2.0	<0.5
	10/15/2008	54.42	23.82	30.60	120	1.6	<0.5	2.8	3.6	<0.5
	1/8/2009	54.42	23.44	30.98	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	4/14/2009	54.42	23.06	31.36	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	8/26/2009	54.42	23.73	30.69	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	12/1/2009	54.42	23.59	30.83	330 [Y]	<0.5	<0.5	1.3	2.2	<0.5
	3/16/2010	54.42	22.60	31.82	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	6/4/2010	54.42	23.10	31.32	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	9/1/2010	54.42	23.51	30.91	<50	<0.5	<0.5	0.52	1.8	<0.5
	12/3/2010	54.42	23.41	31.01	61	<0.5	<0.5	1.0	3.73	<0.5
	3/3/2011	54.42	22.27	32.15	<50	<0.5	<0.5	<0.5	<0.5	<0.5
	5/19/2011	**54.42**	**22.89**	**31.53**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
MW-3D	1/3/2008	54.10		-	<50	<0.50	<2.0	<0.50	<2.0	87.6
	1/22/2008	54.10	22.31	31.79	<50	<0.50	<2.0	<0.50	<2.0	88.3
	4/16/2008	54.10	22.64	31.46	<50	<0.5	<2.0	<0.5	<2.0	71.1
	7/3/2008	54.10	23.17	30.93	<50	<0.5	<2.0	<0.5	<2.0	67.4

Table 3

Historical Groundwater Elevation Data and Analytical Results

15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Casing Elevation [1] (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B [2] (µg/L)
	10/16/2008	54.10	23.62	30.48	<50	<0.5	<0.5	<0.5	<0.5	37

Table 3

Historical Groundwater Elevation Data and Analytical Results

15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Casing Elevation [1] (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B [2] (µg/L)
MW-3D cont.	1/8/2009	54.10	23.07	31.03	<50	<0.5	<0.5	<0.5	<0.5	29
	4/14/2009	54.10	22.36	31.74	<50	<0.5	<0.5	<0.5	<0.5	44
	8/26/2009	54.10	23.41	30.69	<50	<0.5	<0.5	<0.5	<0.5	20
	12/1/2009	54.10	23.27	30.83	110 Y	<0.5	<0.5	<0.5	0.52	24
	3/16/2010	54.10	22.10	32.00	<50	<0.5	<0.5	<0.5	<0.5	7.1
	6/4/2010	54.10	22.70	31.40	<50	<0.5	<0.5	<0.5	<0.5	17
	9/1/2010	54.10	23.09	31.01	78	<0.5	<0.5	1.1	4.71	24
	12/3/2010	54.10	22.90	31.20	<50	<0.5	<0.5	0.56	1.4	13
	3/3/2011	54.10	21.66	32.44	<50	1.3	<0.5	<0.5	0.59	14
	5/19/2011	**54.10**	**22.61**	**31.49**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**5.2**
MW-4D	1/4/2008	53.12		-	<50	<0.50	<2.0	<0.50	<2.0	<0.50
	1/22/2008	53.12	21.11	32.01	91.5	18.7	<2.0	7.08	11.42	219
	4/15/2008	53.12	21.67	31.45	<50	<0.5	<2.0	<0.5	<2.0	27
	7/3/2008	53.12	22.39	30.73	<50	<0.5	<2.0	<0.5	<2.0	6.27
	10/16/2008	53.12	22.98	30.14	<50	<0.5	<0.5	<0.5	<0.5	1.9
	1/8/2009	53.12	22.25	30.87	<50	<0.5	<0.5	<0.5	<0.5	2
	4/14/2009	53.12	21.34	31.78	<50	<0.5	<0.5	<0.5	<0.5	2.2
	8/27/2009	53.12	22.79	30.33	<50	<0.5	<0.5	<0.5	<0.5	2.2
	12/1/2009	53.12	22.49	30.63	120 Y	<0.5	<0.5	1.4	2.3	2.3
	3/16/2010	53.12	21.02	32.10	<50	<0.5	<0.5	<0.5	<0.5	0.65
	6/4/2010	53.12	21.93	31.19	<50	<0.5	<0.5	<0.5	<0.5	1.1
	9/1/2010	53.12	23.32	29.80	<50	<0.5	<0.5	0.85	3.76	2.2
	12/3/2010	53.12	22.46	30.66	<50	<0.5	<0.5	<0.5	0.67	<0.5
	3/3/2011	53.12	20.45	32.67	<50	<0.5	<0.5	<0.5	<0.5	0.58
	5/19/2011	**53.12**	**21.57**	**31.55**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**

Table 3

Historical Groundwater Elevation Data and Analytical Results

15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	Casing Elevation [1] (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B [2] (µg/L)
1573 153 RD	7/2/2008	NS	NM	NC	<50	<0.5	<2.0	<0.5	<2.0	<0.5
	10/16/2008	NS	NM	NC	<50	<0.5	<0.5	<0.5	<0.5	<0.5
Equipment Blanks										
EB-PMP	1/21/2008	-	-	-	<50	<0.50	<2.0	<0.50	<2.0	<0.50
EB-PRB	1/21/2008	-	-	-	<50	<0.50	<2.0	<0.50	<2.0	<0.50
EB-PMP2	1/22/2008	-	-	-	<50	<0.50	<2.0	<0.50	<2.0	<0.50
EB-PRB2	1/22/2008	-	-	-	<50	<0.50	<2.0	<0.50	<2.0	<0.50
ESL (ug/L)	-	-	-	-	**100**	**1**	**40**	**30**	**20**	**5**

Notes:

The first time SOMA monitored this Site was in May 2002.

*: Due to minimal recharge rates in well MW-2, the groundwater elevation recorded on these dates did not match the overall site conditions, May 2002 & August 2003.

NC: Not Calculated

[1] : Top of casing elevations were surveyed to a datum of 67.07 M.S.L by Kier & Wright Civil Engineers & Land Surveyors on May 7, 2002. On October 11, 2004, the site was re-surveyed by Harrington Surveys, Inc. of Walnut Creek, CA to a datum of California Coordinate System, Zone 3, NAD 83.

[2] MtBE analyzed by EPA Method 8021B, and confirmed by EPA Method 8260B.

<: Not detected above the laboratory reporting limit.

Y: Sample exhibits chromatographic pattern which does not resemble standard

[C] Presence confirmed, but confirmation concentration differed by more than a factor of two.

C: Presence confirmed, but RPD between columns exceeds 40%.

H: Heavier hydrocarbons contributed to the quantitation.

NA: Not Analyzed. Well MW-8 was inaccessible during the First Quarter 2005, car was parked over well.
Not Analyzed. Well MW-7 was inaccessible during the First Quarter 2006, car was parked over well.

NM: Not Measured. Well MW-8 was inaccessible during the First Quarter 2005, car was parked over well.
Not Measured. Well MW-7 was inaccessible during the First Quarter 2006, car was parked over well.

The first time SOMA monitored wells MW-6 to MW-9 was in September 2004.

EB-PMP/EB-PRB: Equipment Blanks for Pump and Probe

ESL: Environmental Screening Levels per CRWQCB SFBay Region Interim Final Nov. 2007 (Revised May 2008);
Table F-1a,Groundwater Screening Levels (groundwater is a current or potential drinking water resource)

MW-8 and MW-9 were decommissioned November 13, 2009

Table 4
Historical Gasoline Oxygenates Results
15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)
			1st WBZ				
MW-1	8/8/2002	78	<1.3	<1.3	<1.3	NA	NA
	11/1/2002	42	< 1.0	< 1.0	< 1.0	NA	NA
	2/21/2003	47	<0.5	<0.5	<0.5	NA	NA
	5/28/2003	25	<0.5	<0.5	<0.5	NA	NA
	8/12/2003	<10	<0.5	<0.5	<0.5	NA	NA
	10/9/2003	70	<1.0	<1.0	<1.0	NA	NA
	1/15/2004	55	<0.5	<0.5	<0.5	NA	NA
	5/25/2004	62	<0.7	<0.7	<0.7	NA	NA
	9/21/2004	<10	<0.5	<0.5	<0.5	NA	NA
	12/14/2004	<21.5	<4.3	<4.3	<17.2	NA	NA
	3/11/2005	81	<0.5	<0.5	<2.0	NA	NA
	6/15/2005	<10	<0.5	<0.5	<2.0	NA	NA
	8/26/2005	68.9	<2.15	<2.15	<8.6	NA	NA
	11/11/2005	46	<2.15	<2.15	<8.6	NA	NA
	2/9/2006	11.3	<0.5	<0.5	<2.0	NA	NA
	5/9/2006	<10	<0.5	<0.5	<2.0	0.51	<0.5
	8/10/2006	<43	<2.15	<2.15	<8.60	3.37	<2.15
	10/26/2006	39.4	<1.0	<1.0	<4.0	2.92	<1.0
	1/25/2007	41.4	<0.5	<0.5	<2.0	1.36	<0.5
	4/26/2007	39.6	<0.5	<0.5	<2.0	<0.5	<0.5
	7/25/2007	46.5	<1.0	<1.0	<4.0	<1.0	<1.0
	10/23/2007	53.7	<0.5	<0.5	<2.0	<0.5	<0.5
	1/22/2008	23.8	<0.5	<0.5	2.16	<0.5	<0.5
	4/16/2008	8.36	<0.5	<0.5	<2.0	164	<0.5
	7/3/2008	30.5	<0.5	<0.5	<2.0	1.08	<0.5
	10/15/2008	<20	<1.0	<1.0	<1.0	<1.0	<1.0
	1/7/2009	<25	<1.3	<1.3	<1.3	<1.3	<1.3
	4/14/2009	15	<0.5	<0.5	<0.5	<0.5	<0.5
	8/27/2009	<40	<2.0	<2.0	<2.0	<2.0	<2.0
	12/2/2009	<40	<2.0	<2.0	<2.0	<2.0	<2.0
	3/17/2010	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	6/3/2010	26	<0.5	<0.5	<0.5	<0.5	<0.5
	9/2/2010	<100	<5.0	<5.0	<5.0	<5.0	<5.0
	12/2/2010	<63	<3.1	<3.1	<3.1	<3.1	<3.1
	3/4/2011	40	<0.5	<0.5	<0.5	<0.5	<0.5
	5/20/2011	**<71**	**<3.6**	**<3.6**	**<3.6**	**<3.6**	**<3.6**
MW-2	8/8/2002	21	<0.5	<0.5	<0.5	NA	NA
	11/1/2002	15	<0.5	<0.5	<0.5	NA	NA
	2/21/2003	12	<0.5	<0.5	<0.5	NA	NA
	5/28/2003	31	<0.5	<0.5	<0.5	NA	NA
	8/12/2003	69	<0.8	<0.8	<0.8	NA	NA
	10/9/2003	12	<0.5	<0.5	<0.5	NA	NA
	1/15/2004	<10	<0.5	<0.5	<0.5	NA	NA
	5/25/2004	14	<0.5	<0.5	<0.5	NA	NA
	9/21/2004	<10	<0.5	<0.5	<0.5	NA	NA
	12/14/2004	<2.5	<0.5	<0.5	<2.0	NA	NA

Table 4
Historical Gasoline Oxygenates Results
15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)
MW-2 cont.	3/11/2005	<2.5	<0.5	<0.5	<2.0	NA	NA
	6/15/2005	<10	<0.5	<0.5	<2.0	NA	NA
	8/26/2005	<10	<0.5	<0.5	<2.0	NA	NA
	11/11/2005	<10	<0.5	<0.5	<2.0	NA	NA
	2/9/2006	<10	<0.5	<0.5	<2.0	NA	NA
	5/9/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5
	8/10/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5
	10/26/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5
	1/25/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	4/26/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	7/25/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	10/23/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	1/22/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	4/15/2008	<2.0	<0.5	<0.5	<2.0	2.44	<0.5
	7/2/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	10/15/2008	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	1/7/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	4/13/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	8/27/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/1/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	3/17/2010	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	6/3/2010	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	9/2/2010	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/2/2010	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	3/4/2011	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	5/20/2011	**<10**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
MW-3	8/8/2002	<330	<8.3	<8.3	330	NA	NA
	11/1/2002	85	< 1.3	<1.3	220	NA	NA
	2/21/2003	140	<5.0	<5.0	320	NA	NA
	5/28/2003	520	<10	<10	530	NA	NA
	8/12/2003	180	<4.2	<4.2	270	NA	NA
	10/9/2003	<170	<8.3	<8.3	200	NA	NA
	1/15/2004	<100	<5.0	<5.0	150	NA	NA
	5/25/2004	<100	<5.0	<5.0	270	NA	NA
	9/21/2004	<140	<7.1	<7.1	110	NA	NA
	12/14/2004	<100	<20	<20	154	NA	NA
	3/11/2005	<215	<43	<43	256	NA	NA
	6/15/2005	<215	<10.8	<10.8	374	NA	NA
	8/26/2005	699	<21.5	<21.5	277	NA	NA
	11/11/2005	<430	<21.5	<21.5	171	NA	NA
	2/9/2006	<430	<21.5	<21.5	620	NA	NA
	5/9/2006	367	<10.8	<10.8	594	<10.8	<10.8
	8/10/2006	365	<10.8	<10.8	727	<10.8	<10.8
	10/26/2006	591	<10.8	<10.8	899	<10.8	<10.8
	1/25/2007	711	<10.8	<10.8	768	<10.8	<10.8
	4/26/2007	690	<10.8	<10.8	369	<10.8	<10.8
	7/25/2007	1,340	<10.8	<10.8	565	<10.8	<10.8
	10/23/2007	1,050	<21.5	<21.5	301	<21.5	<21.5
	1/22/2008	373	<10.8	<10.8	170	<0.5	<0.5
	4/16/2008	881	<5.50	<5.50	<22.0	1,850	12.1
	7/3/2008	426	<10.8	<10.8	124	<10.8	<10.8
	10/16/2008	<400	<20	<20	<20	<20	<20
	1/8/2009	<500	<25	<25	<25	<25	<25
	4/13/2009	<500	<25	<25	<25	<25	<25
	8/27/2009	<500	<25	<25	<25	<25	<25
	12/2/2009	270	<13	<13	<13	<13	<13

Table 4
Historical Gasoline Oxygenates Results
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Monitoring Well	Date	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)
MW-3 cont.	3/17/2010	<250	<13	<13	<13	<13	<13
	6/3/2010	<250	<13	<13	<13	<13	<13
	9/2/2010	<250	<13	<13	<13	<13	<13
	12/2/2010	<130	<6.3	<6.3	<6.3	<6.3	<6.3
	3/4/2011	<170	<8.3	<8.3	<8.3	<8.3	<8.3
	5/20/2011	**<130**	**<6.3**	**<6.3**	**<6.3**	**<6.3**	**<6.3**
MW-4	8/8/2002	1500	<17	<17	18	NA	NA
	11/1/2002	580	< 5.0	6	13	NA	NA
	2/21/2003	1600	<20	22	<20	NA	NA
	5/28/2003	690	<8.3	<8.3	17	NA	NA
	8/12/2003	550	<7.1	7.3	18	NA	NA
	10/9/2003	1400	<31	50	<31	NA	NA
	1/15/2004	1,300	<20	25	21	NA	NA
	5/25/2004	560	<8.3	<8.3	24	NA	NA
	9/21/2004	1,300	<50	<50	<50	NA	NA
	12/14/2004	826	<10.75	21	49	NA	NA
	3/11/2005	1,110	<10.8	12.1	<43	NA	NA
	6/15/2005	<110	<5.5	<5.5	22.9	NA	NA
	8/26/2005	902	<5.50	<5.50	37.4	NA	NA
	11/11/2005	884	<10.8	<10.8	<43	NA	NA
	2/9/2006	769	<10.8	16.4	45.6	NA	NA
	5/9/2006	405	<2.15	2.95	31.3	<2.15	<2.15
	8/10/2006	306	<2.15	<2.15	35.3	<2.15	<2.15
	10/26/2006	3430	<10.8	13.8	<43	<10.8	<10.8
	1/25/2007	822	<2.15	2.4	28	2.25	<2.15
	4/26/2007	556	<2.15	2.28	29.2	<2.15	<2.15
	7/25/2007	1,860	<2.15	9.94	24	<2.15	<2.15
	10/23/2007	3,400	<2.15	18.4	25.9	<2.15	<2.15
	1/22/2008	2,580	<5.50	64.7	<22	<0.5	<0.5
	4/15/2008	1,100	<5.50	11.7	<22	39.9	<5.50
	7/2/2008	8,720	<5.50	75.2	<22	<5.50	<5.50
	10/16/2008	700	<3.6	4.2	37	5.4	<3.6
	1/8/2009	1,500	<3.6	9.9	41	3.6	<3.6
	4/13/2009	1,100	<8.3	<8.3	28	<8.3	<8.3
	8/27/2009	4,900	<5.0	24	<5.0	<5.0	<5.0
	12/2/2009	6,800	<5.0	69	<5.0	<5.0	<5.0
	3/17/2010	1,900	<3.6	18	<3.6	<3.6	<3.6
	6/3/2010	930	<3.6	7.7	<3.6	<3.6	<3.6
	9/2/2010	7,200	<3.6	57	<3.6	<3.6	<3.6
	12/2/2010	3,800	<10	30	<10	<10	<10
	3/3/2011	410	<0.71	3.2	<0.71	<0.71	<0.71
	5/19/2011	**130**	**<0.5**	**1.4**	**<0.5**	**<0.5**	**<0.5**
MW-5	8/8/2002	<250	<6.3	<6.3	510	NA	NA
	11/1/2002	66	< 2.0	< 2.0	560	NA	NA
	2/21/2003	<63	<3.1	<3.1	280	NA	NA
	5/28/2003	<33	<1.7	<1.7	110	NA	NA
	8/12/2003	130	<3.6	<3.6	270	NA	NA
	10/9/2003	<100	<5.0	<5.0	740	NA	NA
	1/15/2004	<63	<3.1	<3.1	300	NA	NA
	5/25/2004	<100	<5.0	<5.0	210	NA	NA
	9/21/2004	<130	<6.3	<6.3	550	NA	NA
	12/14/2004	40	<5.5	<5.5	444	NA	NA
	3/11/2005	88.8	<5.5	<5.5	448	NA	NA
	6/15/2005	<43	<2.15	<2.15	88.1	NA	NA
	8/26/2005	274	<5.50	<5.50	195	NA	NA
	11/11/2005	192	<5.50	<5.50	360	NA	NA

Table 4
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Monitoring Well	Date	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)
MW-5 cont.	2/9/2006	218	<5.50	<5.50	523	NA	NA
	5/9/2006	91.8	<2.15	<2.15	163	<2.15	<2.15
	8/10/2006	138	<5.50	<5.50	342	<5.50	<5.50
	10/26/2006	322	<5.50	<5.50	712	<5.50	<5.50
	1/25/2007	878	<5.50	<5.50	552	<5.50	<5.50
	4/26/2007	708	<2.15	<2.15	310	<2.15	<2.15
	7/25/2007	1,020	<2.15	<2.15	356	<2.15	<2.15
	10/23/2007	1,510	<2.15	<2.15	181	<2.15	<2.15
	1/22/2008	470	<0.5	4.56	62.1	<0.5	<0.5
	4/15/2008	566	<1.0	<1.0	29.6	231	5.66
	7/3/2008	2,320	<2.15	<2.15	53.3	<2.15	<2.15
	10/16/2008	990	<5.0	<5.0	82	<5.0	<5.0
	1/8/2009	360	<6.3	<6.3	51	<6.3	<6.3
	4/13/2009	280	<3.1	<3.1	<3.1	<3.1	<3.1
	8/27/2009	1,300	<5.0	<5.0	<5.0	<5.0	<5.0
	12/2/2009	320	<5.0	<5.0	25	<5.0	<5.0
	3/17/2010	570	<1.0	<1.0	<1.0	<1.0	<1.0
	6/4/2010	340	<1.0	<1.0	<1.0	<1.0	<1.0
	9/2/2010	320	<2.5	<2.5	13	<2.5	<2.5
	12/2/2010	200	<3.1	<3.1	<3.1	<3.1	<3.1
	3/4/2011	180	<0.5	<0.5	<0.5	<0.5	<0.5
	5/20/2011	480	<1.0	<1.0	<1.0	<1.0	<1.0
pre-MPE	**8/4/2011**	**110**	**<0.71**	**<0.71**	**2.6**	**<0.71**	**<0.71**
MW-6	9/21/2004	<10	<0.5	<0.5	<0.5	NA	NA
	12/14/2004	<5.5	<5.5	<5.5	<22	NA	NA
	3/11/2005	2.54	<0.5	<0.5	<2.0	NA	NA
	6/15/2005	<20	<1.0	<1.0	<4.0	NA	NA
	8/26/2005	<43	<2.15	<2.15	<8.6	NA	NA
	11/11/2005	<43	<2.15	<2.15	<8.6	NA	NA
	2/9/2006	<43	<2.15	<2.15	<8.6	NA	NA
	5/9/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5
	8/10/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5
	10/26/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5
	1/25/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	4/26/2007	7.21	<0.5	<0.5	<2.0	<0.5	<0.5
	7/25/2007	5.66	<0.5	<0.5	<2.0	<0.5	<0.5
	10/23/2007	6.68	<0.5	<0.5	<2.0	<0.5	<0.5
	1/21/2008	13.9	<0.5	<0.5	<2.0	<0.5	<0.5
	4/15/2008	<2.0	<0.5	<0.5	<2.0	6.78	1.49
	7/2/2008	4.54	<0.5	<0.5	<2.0	<0.5	<0.5
	10/15/2008	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	1/7/2009	<63	<3.1	<3.1	<3.1	<3.1	<3.1
	4/13/2009	<25	<1.3	<1.3	<1.3	<1.3	<1.3
	8/26/2009	<40	<2.0	<2.0	<2.0	<2.0	<2.0
	12/1/2009	<40	<2.0	<2.0	<2.0	<2.0	<2.0
	3/16/2010	<40	<2.0	<2.0	<2.0	<2.0	<2.0
	6/3/2010	<40	<2.0	<2.0	<2.0	<2.0	<2.0
	9/1/2010	<200	<10	<10	<10	<10	<10
	12/2/2010	<330	<17	<17	<17	<17	<17
	3/3/2011	<50	<2.5	<2.5	<2.5	<2.5	<2.5
	5/20/2011	**<50**	**<2.5**	**<2.5**	**<2.5**	**<2.5**	**<2.5**
MW-7	9/21/2004	<10	<0.5	<0.5	1.5	NA	NA
	12/14/2004	<2.5	<0.5	<0.5	<2.0	NA	NA
	3/11/2005	<12.5	<2.5	<2.5	<10	NA	NA
	6/15/2005	<10	<0.5	<0.5	2.23	NA	NA
	8/26/2005	<10	<0.5	<0.5	<2.0	NA	NA
	11/11/2005	<10	<0.5	<0.5	<2.0	NA	NA
	2/9/2006	NA	NA	NA	NA	NA	NA
	5/9/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5
	8/10/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5

Table 4
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Monitoring Well	Date	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)
	10/26/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5

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Monitoring Well	Date	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)
MW-7 contd.	1/25/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	4/26/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	7/25/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	10/23/2007	6.49	<0.5	<0.5	2.58	<0.5	<0.5
	1/21/2008	<2.0	<0.5	<0.5	6.01	<0.5	<0.5
	4/15/2008	8.8	<0.5	<0.5	<2.0	<0.5	1.26
	7/2/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	10/15/2008	<10	<0.5	<0.5	14	<0.5	<0.5
	1/7/2009	<10	<0.5	<0.5	11	<0.5	<0.5
	4/13/2009	<10	<0.5	<0.5	16	<0.5	<0.5
	8/26/2009	<33	<0.5	<0.5	33	<0.5	<0.5
	12/1/2009	<10	<0.5	<0.5	30	<0.5	<0.5
	3/16/2010	11	<0.5	<0.5	<0.5	<0.5	<0.5
	6/3/2010	20	<0.5	<0.5	7.1	<0.5	<0.5
	9/1/2010	47	<0.5	<0.5	7.2	<0.5	<0.5
	12/2/2010	22	<0.5	<0.5	4.9	<0.5	<0.5
	3/4/2011	14	<0.5	<0.5	4.0	<0.5	<0.5
	5/19/2011	**<10**	**<0.5**	**<0.5**	**2.1**	**<0.5**	**<0.5**
MW-8	9/21/2004	<10	<0.5	<0.5	<0.5	NA	NA
	12/14/2004	<2.5	<0.5	<0.5	<2.0	NA	NA
	3/11/2005	NA	NA	NA	NA	NA	NA
	6/15/2005	<10	<0.5	<0.5	<2.0	NA	NA
	8/26/2005	<10	<0.5	<0.5	<2.0	NA	NA
	11/11/2005	<10	<0.5	<0.5	<2.0	NA	NA
	2/9/2006	<10	<0.5	<0.5	<2.0	NA	NA
	5/9/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5
	8/10/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5
	10/26/2006	<10	<0.5	<0.5	<2.0	<0.5	<0.5
	1/25/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	4/26/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	7/25/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	10/23/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	1/21/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	4/15/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	7/2/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	10/15/2008	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	1/7/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	4/13/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	8/27/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	Well Decommissioned 11/13/2009						
MW-9	9/21/2004	<10	<0.5	<0.5	<0.5	NA	NA
	12/14/2004	<2.5	<0.5	<0.5	<2.0	NA	NA
	3/11/2005	<2.5	<0.5	<0.5	<2.0	NA	NA
	6/15/2005	<10	<0.5	<0.5	<2.0	NA	NA
	8/26/2005	<10	<0.5	<0.5	<2.0	NA	NA
	11/11/2005	<10	<0.5	<0.5	<2.0	NA	NA
	2/9/2006	<10	<0.5	<0.5	<2.0	NA	NA
	5/9/2006	<10	<0.5	<0.5	<2.0	2.8	<0.5
	8/10/2006	<10	<0.5	<0.5	<2.0	1.83	<0.5
	10/26/2006	<10	<0.5	<0.5	<2.0	3.07	<0.5
	1/25/2007	<2.0	<0.5	<0.5	<2.0	2.92	<0.5
	4/26/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	7/25/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	10/23/2007	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	1/21/2008	<2.0	<0.5	<0.5	<2.0	1.18	<0.5
	4/15/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	7/2/2008	<2.0	<0.5	<0.5	<2.0	2.07	<0.5
	10/15/2008	<10	<0.5	<0.5	<0.5	1.5	<0.5

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MW-9 contd.	1/7/2009	<10	<0.5	<0.5	<0.5	1.4	<0.5
	4/13/2009	<10	<0.5	<0.5	<0.5	0.97	<0.5
	8/26/2009	<10	<0.5	<0.5	<0.5	2.6	<0.5
Well Decommissioned 11/13/2009							
EX-1	12/2/2009	150	<1.3	<1.3	<1.3	<1.3	<1.3
	3/16/2010	980	<1.3	2.4	27	<1.3	<1.3
	6/3/2010	570	<1.3	1.9	<1.3	<1.3	<1.3
	9/1/2010	470	<0.5	1.4	2	<0.5	<0.5
	12/2/2010	1,300	<2.0	3.6	15	<2.0	<2.0
	3/3/2011	690	<0.71	2.5	12	<0.71	<0.71
	5/19/2011	**370**	**<0.71**	**1.9**	**13**	**<0.71**	**<0.71**
EX-2	12/2/2009	<63	<3.1	<3.1	<3.1	<3.1	<3.1
	3/16/2010	<100	<5.0	<5.0	<5.0	<5.0	<5.0
	6/3/2010	<100	<5.0	<5.0	<5.0	<5.0	<5.0
	9/1/2010	<50	<2.5	<2.5	<2.5	<2.5	<2.5
	12/2/2010	<100	<5.0	<5.0	<5.0	<5.0	<5.0
	3/3/2011	<100	<5.0	<5.0	<5.0	<5.0	<5.0
	5/19/2011	**<100**	**<5.0**	**<5.0**	**<5.0**	**<5.0**	**<5.0**
MPE-1	**8/4/2011**	**<500**	**<25**	**<25**	**<25**	**<25**	**<25**
MPE-2	**8/4/2011**	**<330**	**<17**	**<17**	**<17**	**<17**	**<17**
2nd WBZ							
MW-1D	1/3/2008	111	<0.5	<0.5	<2.0	NA	NA
	1/22/2008	12.9	<0.5	<0.5	<2.0	<0.5	<0.5
	4/16/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	7/3/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	10/15/2008	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	1/8/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	4/14/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	8/26/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/1/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	3/16/2010	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	6/4/2010	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	9/1/2010	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/3/2010	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	3/3/2011	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	5/19/2011	**<10**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
MW-3D	1/3/2008	37.3	<0.5	3.12	15.3	NA	NA
	1/22/2008	15.6	<0.5	3.1	15.3	<0.5	<0.5
	4/16/2008	17.7	<0.5	<0.5	<2.0	<0.5	<0.5
	7/3/2008	<2.0	<0.5	<0.5	7.45	<0.5	<0.5
	10/16/2008	<10	<0.5	<0.5	4.7	<0.5	<0.5
	1/8/2009	<10	<0.5	<0.5	3.4	<0.5	<0.5
	4/14/2009	<10	<0.5	<0.5	5	<0.5	<0.5
	8/26/2009	<10	<0.5	<0.5	1.6	<0.5	<0.5
	12/1/2009	<10	<0.5	<0.5	2.2	<0.5	<0.5
	3/16/2010	<10	<0.5	<0.5	0.65	<0.5	<0.5
	6/4/2010	<10	<0.5	<0.5	1.8	<0.5	<0.5
	9/1/2010	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/3/2010	<10	<0.5	<0.5	0.93	<0.5	<0.5
	3/3/2011	<10	<0.5	<0.5	1.0	<0.5	<0.5
	5/19/2011	**<10**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
MW-4D	1/4/2008	25	<0.5	<0.5	<2.0	NA	NA
	1/22/2008	124	<0.5	4.9	3.32	<0.5	<0.5
	4/15/2008	25.7	<0.5	<0.5	<2.0	<0.5	<0.5
	7/3/2008	3.38	<0.5	<0.5	<2.0	<0.5	<0.5

Table 4
Historical Gasoline Oxygenates Results
15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)
	10/16/2008	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	1/8/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	4/14/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	8/27/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/1/2009	<10	<0.5	<0.5	<0.5	<0.5	<0.5

Table 4
Historical Gasoline Oxygenates Results
15101 Freedom Avenue, San Leandro, CA

Monitoring Well	Date	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)
MW-4D (cont)	3/16/2010	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	6/4/2010	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	9/1/2010	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	12/3/2010	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	3/3/2011	<10	<0.5	<0.5	<0.5	<0.5	<0.5
	5/19/2011	**<10**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
1573 153 RD	7/2/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
	10/16/2008	<10	<0.5	<0.5	<0.5	<0.5	<0.5
EB-PMP	1/21/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
EB-PRB	1/21/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
EB-PMP2	1/22/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
EB-PRB2	1/22/2008	<2.0	<0.5	<0.5	<2.0	<0.5	<0.5
ESL		**12**	**NE**	**NE**	**NE**	**0.5**	**0.05**

Notes:
August 8, 2002 was the first time that samples were analyzed for Gasoline Oxygenates
<: Not detected above the laboratory reporting limit.
NA: Not Analyzed. Well MW-8 was inaccessible during the 1Q05 & well MW-7 (1Q06) car was parked over each well.
NE: Not Established
TBA: tert-Butyl Alcohol
DIPE: Isopropyl Ether
ETBE: Ethyl tert-Butyl Ether
TAME: Methyl tert-Amyl Ether
ESL: Environmental Screening Levels per CRWQCB SFBay Region Interim Final Nov. 2007 (Revised May 2008); Table F-1a,Groundwater Screening Levels (groundwater is a current or potential drinking water resource)
MW-8 and MW-9 were decommissioned November 13, 2009

APPENDIX A
Previous Activities

In May 1999, three 10,000-gallon USTs, approximately 250 feet of product piping, and six product dispensers were removed from the site (Geo-Logic, 1999). A total of 21 soil samples were collected for laboratory analyses from the removal areas, including seven from the east and west sides of the UST removal excavation, at depths ranging from 12 to 14 feet below ground surface (bgs), and 14 from beneath the fuel dispensers and product delivery piping ranging in depth from 2.5 to 3.5 feet bgs. Samples were analyzed for the following: total petroleum hydrocarbons as gasoline (TPH-g); benzene, toluene, ethylbenzene, xylenes (BTEX); and methyl tertiary-butyl ether (MtBE). Analysis results indicated the need for removal of additional soil from product piping areas and the UST removal excavation. Concentrations of TPH-g, BTEX and MtBE in soil samples from the UST removal excavation were elevated relative to those from the product piping and dispenser areas, where concentrations were relatively low. Following overexcavation, three soil samples were collected for laboratory analysis from the enlarged UST removal excavation ranging in depth from 16.5 to 24.5 feet bgs, and one from the product delivery piping at 5 feet bgs. Laboratory analysis detected elevated concentrations in soil samples at 24.5 feet bgs from the UST removal excavation relative to those at 16.5 and 19.5 feet bgs. Low concentrations of petroleum hydrocarbons were detected in the soil sample from the product delivery piping.

In July 1999, one 14,000-gallon UST divided into a 6,000-gallon unit for diesel and an 8,000-gallon unit for gasoline, and one 20,000-gallon UST for gasoline were installed at the site (Geo-Logic, 1999).

On January 3, 2000, ACHCS notified the property owner, Mr. Pazdel, of an unauthorized release that had occurred during removal of old USTs in May 1999. ACHCS requested a preliminary site assessment.

On July 5, 2001, a soil and groundwater investigation was conducted at the site to delineate the extent of soil and groundwater impact discovered during removal of the USTs, product delivery piping and product dispensers in May 1999 (CSS Environmental Services, 2001). Five soil borings, SB-1 through SB-5, were advanced using direct-push methods, to a maximum depth of 31 feet bgs. Groundwater was encountered in borings at depths ranging from 29 to 30 feet bgs, and stabilized at depths ranging from 17 to 20 feet bgs. Ten soil samples were collected from borings for laboratory analysis of TPH-g, BTEX and MtBE. Analytical results revealed elevated concentrations between 19 and 25.5 feet bgs. Maximum concentrations of TPH-g and BTEX in samples were 470,000 µg/kg, 2,600 µg/kg, 16,000 µg/kg, 12,000 µg/kg, and 73,000 µg/kg, respectively. MtBE was not detected in any soil samples. Grab groundwater samples were collected from each boring for laboratory analysis of TPH-g, BTEX and MtBE. Maximum concentrations of TPH-g and benzene in boring samples were 83,000 µg/L and 19,000 µg/L, respectively. MtBE was detected in four of five grab groundwater samples, at a maximum concentration of 87,000 µg/L.

In April 2002, groundwater monitoring wells MW-1 through MW-5 were installed on the site to a total depth of 30 feet bgs, and competed with well screens installed between 15 and 30 feet bgs. The wells were installed to evaluate the groundwater flow gradient and the extent of dissolved-phase fuel hydrocarbons in groundwater (SOMA, 2002). Groundwater was first encountered at depths ranging from approximately 25 to 29 feet bgs, and stabilized at depths ranging from 21 to 23 feet bgs. Five soil samples were collected from borings for laboratory analyses of TPH-g, BTEX and MtBE. Results revealed elevated concentrations of TPH-g and BTEX between 21 and 26 feet bgs, coincident with the depth at which groundwater was first encountered in the boreholes. No MtBE was detected in soil samples. Groundwater samples were initially collected from each monitoring well during Second Quarter 2002 (May 2002) for laboratory analyses of TPH-g, BTEX and MtBE (SOMA, 2002a). Maximum concentrations of TPH-g, benzene and MtBE in groundwater samples were 44,000 µg/L, 6,000 µg/L and 12,000 µg/L, respectively. Groundwater was determined to flow south across the site. Elevated levels of dissolved-phase hydrocarbons in the farthest downgradient monitoring well indicated off-site migration.

Between August and October 2003, a soil and groundwater investigation was conducted to evaluate off-site extent of dissolved-phase hydrocarbon migration with groundwater (SOMA, 2003). The investigation included a sensitive receptor survey to locate water supply wells and/or water bodies within a 2,000-foot radius of the site, and a conduit study to identify underground utilities adjacent to the site beneath Freedom Avenue, Fairmont Drive and 153rd Avenue. Soil borings TWB-1 through TWB-6 were advanced to depths ranging from 30 to 44 feet bgs, at locations ranging from 125 to 750 feet hydraulically downgradient from the site. Fourteen soil samples were collected at depths ranging from 16 to 39 feet bgs for laboratory analysis of TPH-g, BTEX, MtBE and 1,2-dichloroethene (1,2-DCE). Results revealed soil impact off-site to a maximum distance of 265 feet hydraulically downgradient of the site, at depths ranging from 18 to 31.5 feet bgs. Elevated concentrations were detected at depths ranging from 21.5 to 24.5 feet bgs, approximately 125 feet hydraulically downgradient from the site. Concentrations of benzene, MtBE and 1,2 DCE were not detected in soil samples. Grab groundwater samples were collected from each boring for laboratory analysis of TPH-g, BTEX, MtBE and 1,2-dichloroethane (1,2-DCA). Maximum concentrations of TPH-g and benzene were 410,000 µg/L and 2,200 µg/L, respectively, detected in a boring 125 feet hydraulically downgradient of the site. Maximum concentration of MtBE was 34 µg/L, detected in a boring 265 feet hydraulically downgradient of the site. The investigation resulted in preliminary identification of two water-bearing zones beneath the site and proximity. The sensitive receptor survey identified 10 wells within 2,000 feet of the site. Three are located hydraulically downgradient of the site: one irrigation well and two wells of unknown use. The remaining wells are either hydraulically upgradient or crossgradient of the site. No water body was identified within a 0.5-mile distance from the site. The conduit study revealed two sewer lines beneath Fairmont Drive

and 153rd Avenue; it was determined that neither was submerged by groundwater.

In September 2004, an additional soil and groundwater investigation was conducted to further evaluate the extent of dissolved-phase hydrocarbon migration with groundwater off-site (SOMA 2004). Groundwater monitoring wells MW-6 thru MW-9 were installed downgradient from the site to total depths ranging from 21 to 33 feet bgs, and completed with well screens ranging from 4 to 15 feet long installed at the base of each well. Groundwater was first encountered at depths ranging from approximately 15 to 20 feet bgs, and stabilized at depths ranging from 12 to 17 feet bgs. Four soil samples were collected from one monitoring well borehole. Soil samples were not collected from other boreholes because of extensive and unexpected lateral lithologic changes encountered between the well boreholes during drilling, necessitating continuous coring that precluded soil sample collection. Collected samples were analyzed for TPH-g and BTEX; neither was detected.

During this investigation, an attempt was made to collect a groundwater sample from an irrigation well hydraulically downgradient from the site, identified by the sensitive receptor survey conducted between August and October 2003. The irrigation well had been unused for some time and, subsequently, no groundwater sample could be collected.

An attempt was made to locate another well of unknown use hydraulically downgradient from the site, also identified by the sensitive receptor survey. This well could not be located despite canvassing of the surrounding residential neighborhood with written requests for information. Based on results of this investigation and the previous investigation conducted between August and October 2003, one water-bearing zone was identified to consist of discontinuous water-bearing layers and stringers separated by discontinuous clay lenses of varying thickness. Additionally, a preferential flow pathway study was proposed consisting of a possible buried stream channel trending north to south beneath the eastern portion of the site, and extending off-site to the south, beneath the intersection of 153rd Avenue, Fairmont Drive and Liberty Avenue, which is hydraulically downgradient from the site.

On November 21, 2005, ACHCS requested that the property owner submit a workplan for a soil and water investigation by January 21, 2006. It was submitted on December 28, 2005 (SOMA, 2005) and proposed installation of eight cone penetrometer test (CPT), membrane interface probe (MIP) borings to refine hydrogeologic conditions using CPT technology on- and off-site. The purpose of this investigation was to define the horizontal and vertical extent of the soil and groundwater impact on- and off-site using MIP technology, and to collect soil and groundwater samples for laboratory analyses to support MIP findings.

Based on a telephone conversation between SOMA and ACHCS, an addendum to SOMA's December 2005 workplan was prepared and submitted on March 3, 2006. The workplan provided further clarification for advancing the CPT/MIP as requested by ACHCS.

On April 10, 2006, SOMA oversaw drilling of CPT/MIP boreholes. Fisch Environmental, SOMA's subcontractor, used a Geoprobe 6600. Because of unforeseen subsurface drilling conditions, and the fact that Fisch's drilling rig was not strong enough to drill through the hard subsurface materials, drilling could not advance beyond 35 feet bgs in any of the CPT/MIP locations despite three days effort. An ACHCS representative was present during this operation. On April 26, using a hollow stem auger, a CPT calibration borehole was drilled to 47 feet bgs. Because CPT/MIP boreholes could not be advanced to targeted depths, Gregg Drilling was selected to drill CPT/MIP boreholes at a later date, and Fisch's compensation was to be appropriately reduced.

In a letter dated May 29, 2006, ACHCS reduced the quantity of on-site CPT/MIP borings from six to five, altered some boring locations, adjusted depths at which to collect groundwater samples, and requested development of a site conceptual model (SCM) and corrective action plan (CAP) along with an interim remediation and migration control evaluation. ACHCS established a November 30, 2006 deadline for report submittal.

On September 7, 2006, SOMA resumed the field investigation. To characterize site lithology and hydrogeology, and evaluate lateral and vertical distribution of soil and groundwater impact on- and off-site, SOMA supervised advancement of eight CPT/MIP borings by Gregg, using a 25-ton CPT rig. The MIP portion of the study was performed by Fisch utilizing an MIP probe attached to Gregg's CPT probe. After completion of the CPT/MIP program, eight borings were advanced using direct-push drilling methods, in the immediate proximity of the CPT/MIP borings. These borings were advanced to collect soil and groundwater samples for laboratory analyses to support MIP findings.

Investigation results were presented by SOMA in "Additional Soil and Groundwater Investigation Report and Initial Conceptual Site Model, Texaco Gasoline Service Station, 15101 Freedom Avenue, San Leandro, California," dated November 27, 2006. The report also included an interim remediation and migration control evaluation.

In summary, the report described two main water-bearing zones designated as the First and Second water-bearing zones (WBZs). Both WBZs appear to be laterally continuous across the site and hydraulically downgradient of the site, and are separated by a laterally continuous aquitard. Moderately weathered fuel hydrocarbons are adsorbed to soil or dissolved in groundwater within the First and Second WBZs. The source area in the First WBZ appears to be in proximity to the location of the former USTs and the existing fuel dispensers in both the

north and southeast portions of the site. A source area for the Second WBZ is indeterminate because limited data for the Second WBZ was generated by the investigation. The site is located in an area of primarily residential properties with a commercial property to the east. Population/receptors exposed to fuel hydrocarbons in soil and groundwater of the First WBZ on- and off-site include current and future on-site workers and current off-site commercial workers and residents. Sources are fuel hydrocarbons adsorbed to soil, and dissolved-phase hydrocarbons in groundwater, of the First WBZ. Exposure pathways for on-site receptors are inhalation of volatile emissions from impacted soil and groundwater of the First WBZ. The only exposure pathway for off-site residents appears to be incidental ingestion of groundwater from the First and Second WBZs. The soil interim remediation alternatives evaluated included soil excavation, soil vapor extraction (SVE), and multi-phase extraction (MPE). Groundwater interim remediation alternatives included groundwater extraction, ozone sparging and hydrogen peroxide injection.

ACHCS correspondence dated March 14, 2007 directed that a workplan be prepared to address ACHCS comments contained therein and SOMA's recommendations in the November 27, 2006 report.

A workplan detailing proposed monitoring well installation, soil gas survey and remediation feasibility study was submitted to ACHCS on April 11, 2007 and approved in ACHCS correspondence dated October 18, 2007.

SOMA submitted "Additional Soil and Groundwater Investigation for Remedial Investigation and Feasibility Study" on March 14, 2008. ACHCS comments included in correspondence dated April 25, 2008 were addressed by SOMA's correspondence dated June 9, 2008.

In December 2007 SOMA installed three groundwater monitoring wells within the Second WBZ (MW-1D, MW-2D, and MW-3D) to approximately 60 feet bgs. A soil vapor study was conducted utilizing four soil gas sampling probes (SGS-1 through SGS-4, advanced to 5 feet bgs). Based on results of the soil gas sampling, concentrations of COCs in soil gas at the site are not considered a significant risk to human health.

In March 2009, ACHCS approved SOMA's CAP and initiated a public comment period for affected stakeholders to comment on SOMA's remedial action plan. On April 27, 2009, SOMA installed extraction wells MPE-1 and MPE-2 onsite. In their May 2009 correspondence, ACHCS approved SOMA's recommendation to decommission MW-8 and MW-9, off site wells that have consistently demonstrated COCs below ESLs and laboratory detection limits. November 2009, SOMA installed EX-1 and EX-2 off-site, within the downgradient plume and installed a groundwater extraction and treatment system at the site.

Quarterly and now Semi-Annual groundwater monitoring/sampling has been regularly conducted at the site since Second Quarter 2002.

APPENDIX B
Permits

Work Order Number: B0001

This WO is ___ / is not ✓ open for charges.

Permit Number: R11LD11497

Permit Issuance Date: 6-16-11

Permit Expiration Date: 6-15-12

COUNTY OF ALAMEDA PUBLIC WORKS AGENCY
ROADWAY ENCROACHMENT PERMIT

This Permit is issued in accordance with Chapter 12.08 of the Alameda County General Ordinance Code

Name & Address of Property Owner:
Mohammad Pazdel
1770 Pistacia Court
Fairfield CA 94533
Phone Number:

Job Site Address:
15101 Freedom Avenue
San Leandro, CA

Name & Address of Contractor:
SOMA Environmental Engineering
2680 Bayshore Drive, Suite A
Pleasanton, CA 94588
Phone Number: 925-734-6420

(This statement to be completed by the Agency)
This permit is issued to the owner ___ / contractor ✓; if "owner" is checked, he/she is ___ / is not ___ exempt from the requirement that work in the roadway be performed by a licensed contractor.

The Applicant intends to perform the following work scope: under ACPWA - Water Resource Permit
place a bollard over and lauden cover around well on 152nd Ave to utilize well for groundwater and soil vapor extraction during remediation events at the site, Advance 6 off site soil and groundwater borings (attached figure and scope)

Licensed Contractor Declaration:
I hereby affirm, under penalty of perjury, that I hold the following contractor's license, which is in full force and effect, under the applicable provisions of the State Business and Professions Code.
License Class and No. C57 748767
Contractor's Signature:
Gregg Drilling & Testing
950 Howe Rd, Martinez CA

Worker's Compensation Insurance Declaration:
I hereby affirm, under penalty of perjury, that I will, during the performance of any and all work authorized by this permit, satisfy the requirements of the State Labor Code with regard to Worker's Compensation Insurance, as declared below:
___ I will maintain a certificate of consent to self-insure.
△ I will maintain the following insurance policy:
Carrier's Name and Policy No.: Seabright BB109076
___ I will not employ any person in any manner so as to become subject to the worker's compensation laws of the State.
Owner's / Contractor's Signature:

All work and/or access shall be performed in accordance with the requirements of Chapter 12.08 and, unless otherwise specified below, shall be fully compliant with each of the terms and conditions of the attached General Provisions:

CALL THIS NUMBER FOR INSPECTIONS: 670 6637

Bond Information:

BY: ___ Alameda County

Insp. Fee ✓ or Deposit ___:
324

Work Completed (Date): ___

Inspector:

I certify that the information that I have entered into this permit application is correct, and I agree to comply with all of the terms and conditions and other requirements of the issued Permit.

Signature of Applicant

6/18/11
Date

THIS PERMIT IS INCOMPLETE WITHOUT THE ATTACHED GENERAL PROVISIONS

Work Order Number:*	Permit Number:
*This WO is ____ / is not ____ open for charges.	Permit Issuance Date:_____ Permit Expiration Date:

COUNTY OF ALAMEDA PUBLIC WORKS AGENCY
ROADWAY ENCROACHMENT PERMIT

This Permit is issued in accordance with Chapter 12.08 of the Alameda County General Ordinance Code

Name & Address of Property Owner:
Mohammad Pazdel
1770 Pistacio Court
Fairfield, CA 94533
Phone Number:

Name & Address of Contractor:
SOMA Environmental Engineering
6620 Owens Drive, Suite A
Pleasanton, CA 94588
Phone Number: 925-734-6400

Job Site Address:
15101 Freedom Avenue
San Leandro, CA

(This statement to be completed by the Agency)
This permit is issued to the owner ___ / contractor ✓;
if "owner" is checked, he/she is ___ / is not ___ exempt from the requirement that work in the roadway be performed by a licensed contractor.

The Applicant intends to perform the following work scope: under ACPWA - Water Resource Permit
place a barricade over and caution cones around well on 152nd ave to utilize well for groundwater and soil vapor extraction during remediation events at the site. Advance 5 off site soil and groundwater borings (attached figure and scope)

Licensed Contractor Declaration:
I hereby affirm, under penalty of perjury, that I hold the following contractor's license, which is in full force and effect, under the applicable provisions of the State Business and Professions Code.
License Class and No.
Contractor's Signature:

Gregg Drilling & Testing
950 Howe Rd, Martinez CA

Worker's Compensation Insurance Declaration:
I hereby affirm, under penalty of perjury, that I will, during the performance of any and all work authorized by this permit, satisfy the requirements of the State Labor Code with regard to Worker's Compensation Insurance, as declared below:
___ I will maintain a certificate of consent to self-insure.
___ I will maintain the following insurance policy:
Carrier's Name and Policy No.:
___ I will not employ any person in any manner so as to become subject to the worker's compensation laws of the State.
Owner's/Contractor's Signature:

All work and/or access shall be performed in accordance with the requirements of Chapter 12.08 and, unless otherwise specified below, shall be fully compliant with each of the terms and conditions of the attached General Provisions:

CALL THIS NUMBER FOR INSPECTIONS:

Bond Information:	Insp. Fee ___ or Deposit ___:
BY:_____, Alameda County	Work Completed (Date):_____ Inspector:

I certify that the information that I have entered into this permit application is correct, and I agree to comply with all of the terms and conditions and other requirements of the issued Permit.

_____ Signature of Applicant _____ Date

THIS PERMIT IS INCOMPLETE WITHOUT THE ATTACHED GENERAL PROVISIONS

Advance Soil Borings Within the First Water-Bearing Zone

SOMA proposes advancing five soil borings around MW-6 and EX-2 within the First WBZ at locations illustrated in Figure 3. Locations were selected based on the presence of elevated levels of site-related contaminants in MW-6.

SOMA proposes utilizing DPT to advance these borings under permit from the Alameda County Public Works Department Water Resources Division. Prior to boring advancement, depth to groundwater in the adjacent wells will be measured in order to verify the target boring depth. SOMA proposes advancing all borings in that area to a depth of 30 feet bgs unless above-mentioned depth-to-groundwater measurements dictate otherwise. Soil samples may be collected from areas of gross contamination of each boring for chemical analysis.

Each boring will be continuously cored, and descriptions of cored soil will be entered in logs in accordance with the Unified Soil Classification System (USCS). In addition, cored soil will be checked for hydrocarbon odors and visual staining, and screened using a photo-ionization detector (PID). PID readings will be noted in boring logs.

SOMA will collect grab groundwater samples using disposable bailers. A disposable bailer will be used to evacuate a desirable amount of groundwater and decant it slowly (to avoid volatilization) into appropriately preserved laboratory-supplied containers. Each sample will be labeled with a unique sample identifier and preserved on ice pending delivery to a certified analytical laboratory. All samples will be delivered to the laboratory for chemical analysis under appropriate chain-of-custody protocol.

Following groundwater sampling, borings will be destroyed with a neat cement grout mixture, tremmied into place, and completed at the surface with materials to match existing grade.

INSPECTION REQUIREMENTS

- All encroachments authorized by this Permit shall be subject to monitoring, inspection, and/or testing by a County representative; notify the County before you start work by calling the number on the front of this form.

- If the face of this Permit is marked to indicate that the assigned County work order is open for charges, a job account will be opened and the assigned inspectors and other representatives will charge the actual cost of all required tests and inspections against this account. All cost overruns must be resolved prior to closeout of this Permit. Any underruns will be returned to the Permittee as soon as possible following the closeout.

CAUTION!

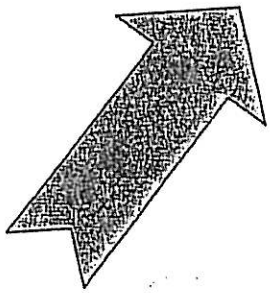
Most traffic signals and some streetlights are connected to their power sources with underground wiring. Many signals are also wired to traffic detector loops buried in the roadway. None of these County-owned wiring runs are included in the Underground Service Alert (USA) review and marking processes.

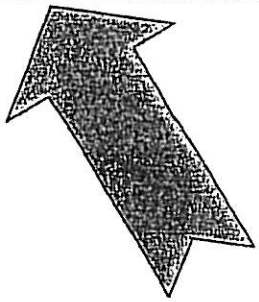
If you intend to excavate within 500' of a traffic signal, or in proximity to County-owned streetlights, you must contact the County traffic signal maintenance office at

→(510) 670 - 5537←

at least 48 hours in advance of the start of your planned work.

If you cause a signal outage, a streetlight failure, or other damage to County signal or streetlight facilities because you failed to contact the signal office to get the facilities marked, you will be billed for the full cost of our emergency response and repairs.





- Proposed Borings
- Monitoring Wells Installed 12/07
- Monitoring Wells
- MPE wells installed in April 2009 and extraction wells installed in Nov 2009
- Soil Borings drilled July 2001
- Temporary Well Borehole Drilled by SOMA September 2003

FREEDOM AVENUE

FAIRMONT DRIVE

INTERSTATE 580

151 st AVENUE

MW-1D

MW-1

SB-4

DISPENSER ISLANDS

Former USTs

SB-1

MW-2

MW-3D

MW-3

SB-2

SB-3

MPE-2

Existing USTs

STATION BUILDING

MW-4

DISPENSER ISLANDS

SB-5

MW-4D

MPE-1

MW-5

RESIDENTIAL AREA

EX-1

rail

Dead End

~19'

DP-1

DP-2

EX-2

MW-6

10' min

No Right Turn

DP-3

~85'

35 MPH zone

street light

W21-5 (C24)

~40'

G20-2 (C14)

~5.5'

~27'

DP-4

C23

parking lane

152 nd AVENUE

street light

DP-5

W21-5 (C24)

~45'

LIBERTY ST

TWB-2

MW-7

~93'

parking lane

W21-5 (C24)

C23

MW-8

C23

TWB-3

RESIDENTIAL AREA

NOTES:

-Traffic sign spacing will be in accordance with the Chapter 6 of the Caltrans MUTCD with respect to the established speed limit of 35 MPH (or appropriate) in the vicinity of proposed work

C23	Road Work Ahead
G20-2 (C14)	End Road Work
W21-5 (C24)	Shoulder Work Ahead
R9-9	SIDEWALK CLOSED
R9-11	SIDEWALK CLOSED AHEAD CROSS HERE (w/ arrow))
R9-11a	SIDEWALK CLOSED CROSS HERE (w/ arrow)

TRAFFIC SIGN FACING RIGHT

CONES (BARICADE)

A FLAGGER, a trained individuall assisting with pedestrian crossing and traffic control

General Areas of Traffic Management

N

approximate scale in feet

0 50 100

Traffic Plan for Boring DP-2

SOMA ENVIRONMENTAL ENGINEERING, INC.

- Proposed Borings
- Monitoring Wells Installed 12/07
- Monitoring Wells
- MPE wells installed in April 2009 and extraction wells installed in Nov 2009
- Soil Borings drilled July 2001
- Temporary Well Borehole Drilled by SOMA September 2003

C23

FREEDOM AVENUE

C23 (on north side of overpass)

W9-3R (C20)

FAIRMONT DRIVE

INTERSTATE 580

W21-5 (C24)

MW-1D

MW-1

SB-4

DISPENSER ISLANDS

Former USTs

SB-1

MW-2

MW-3D

MW-3

SB-2

SB-3

MPE-2

Existing USTs

STATION BUILDING

MW-4

DISPENSER ISLANDS

SB-5

MW-4D

MPE-1

MW-5

151 st AVENUE

RESIDENTIAL AREA

Dead End

EX-1

rail

~19'

DP-1

No Right Turn

EX-2

DP-2

MW-6

~85'

35 MPH zone

street light

~40'

R4-7

DP-3

12' min

G20-2 (C14)

~27'

~5.5'

R4-7

12' min

DP-4

parking lane

street light

DP-5

W21-5 (C24)

~45'

G20-2 (C14)

LIBERTY ST

C23

TWB-2

MW-7

152 nd AVENUE

W21-5 (C24)

~93'

parking lane

G20-2 (C14)

C23

MW-8

TWB-3

C23

RESIDENTIAL AREA

N

NOTES:
-Traffic sign spacing will be in accordance with the Chapter 6 of the Caltrans MUTCD with respect to the established speed limit of 35 MPH (or appropriate) in the vicinity of proposed work

C23	Road Work Ahead
R4-7	Keep Right
W9-3R(C20)	Right Lane Closed Ahead
G20-2 (C14)	End Road Work
W21-5 (C24)	Shoulder Work Ahead
R9-9	SIDEWALK CLOSED
R9-11	SIDEWALK CLOSED AHEAD CROSS HERE (w/ arrow))
R9-11a	SIDEWALK CLOSED CROSS HERE (w/ arrow)

TRAFFIC SIGN FACING RIGHT

CONES (BARICADE)

A FLAGGER, a trained individuall assisting with pedestrian crossing and traffic control

General Areas of Traffic Management

Optional (if required by permit)

approximate scale in feet

0 50 100

Traffic Plan for Boring DP-3

SOMA ENVIRONMENTAL ENGINEERING, INC.

- Proposed Borings
- Monitoring Wells Installed 12/07
- Monitoring Wells
- MPE wells installed in April 2009 and extraction wells installed in Nov 2009
- Soil Borings drilled July 2001
- Temporary Well Borehole Drilled by SOMA September 2003

FREEDOM AVENUE

FAIRMONT DRIVE

INTERSTATE 580

151 st AVENUE

MW-1D

MW-1

SB-4

DISPENSER ISLANDS

Former USTs

SB-1

MW-2

MW-3D

MW-3

SB-2

SB-3

MPE-2

Existing USTs

STATION BUILDING

MW-4

DISPENSER ISLANDS

SB-5

MW-4D

MPE-1

MW-5

RESIDENTIAL AREA

rail

EX-1

35 MPH zone

~19'

DP-1

EX-2

DP-2

MW-6

DP-3

~85'

street light

street light

~40'

R9-9

~27'

~5'

DP-4

R9-11a

parking lane

parking lane

152 nd AVENUE

street light

DP-5

~45'

LIBERTY ST

street light

TWB-2

MW-7

G20-2 (C14)

G20-2 (C14)

~93'

W21-5 (C24)

R9-11

INSTALLED AT LARK AND 152nd Ave

parking lane

MW-8

RESIDENTIAL AREA

TWB-3

NOTES:
-Traffic sign spacing will be in accordance with the Chapter 6 of the Caltrans MUTCD with respect to the established speed limit of 35 MPH (or appropriate) in the vicinity of proposed work

C23	Road Work Ahead
G20-2 (C14)	End Road Work
W21-5 (C24)	Shoulder Work Ahead
R9-9	SIDEWALK CLOSED
R9-11	SIDEWALK CLOSED AHEAD CROSS HERE (w/ arrow))
R9-11a	SIDEWALK CLOSED CROSS HERE (w/ arrow)

TRAFFIC SIGN FACING RIGHT

CONES (BARICADE)

A FLAGGER, a trained individuall assisting with pedestrian crossing and traffic control

General Areas of Traffic Management

N

approximate scale in feet

0 50 100

Traffic Plan (Boring DP-4)

SOMA ENVIRONMENTAL ENGINEERING, INC.

- Proposed Borings
- Monitoring Wells Installed 12/07
- Monitoring Wells
- MPE wells installed in April 2009 and extraction wells installed in Nov 2009
- Soil Borings drilled July 2001
- Temporary Well Borehole Drilled by SOMA September 2003

C23

FREEDOM AVENUE

C23 (on north side of overpass)

W9-3R (C20)

FAIRMONT DRIVE

INTERSTATE 580

W21-5 (C24)

MW-1D

MW-1

SB-4

DISPENSER ISLANDS

Former USTs

SB-1

MW-2

MW-3D

MW-3

SB-2

SB-3

MPE-2

Existing USTs

STATION BUILDING

MW-4

DISPENSER ISLANDS

SB-5

MW-4D

MPE-1

MW-5

151 st AVENUE

RESIDENTIAL AREA

Dead End

rail

EX-1

35 MPH zone

~19'

DP-1

No Right Turn

EX-2

MW-6

DP-2

DP-3

~85'

street light

~40'

G20-2 (C14)

W21-5 (C24)

C23

~5.5'

DP-4

~27'

parking lane

~45'

G20-2 (C14)

LIBERTY ST

street light

DP-5

TWB-2

MW-7

152 nd AVENUE

W21-5 (C24)

~93'

parking lane

G20-2 (C14)

C23

MW-8

TWB-3

RESIDENTIAL AREA

NOTES:
-Traffic sign spacing will be in accordance with the Chapter 6 of the Caltrans MUTCD with respect to the established speed limit of 35 MPH (or appropriate) in the vicinity of proposed work

C23	Road Work Ahead
R4-7	Keep Right
W9-3R(C20)	Right Lane Closed Ahead
G20-2 (C14)	End Road Work
W21-5 (C24)	Shoulder Work Ahead
R9-9	SIDEWALK CLOSED
R9-11	SIDEWALK CLOSED AHEAD CROSS HERE (w/ arrow))
R9-11a	SIDEWALK CLOSED CROSS HERE (w/ arrow)

TRAFFIC SIGN FACING RIGHT

CONES (BARICADE)

A FLAGGER, a trained individuall assisting with pedestrian crossing and traffic control

General Areas of Traffic Management

Optional (if required by permit)

N

approximate scale in feet

0 50 100

Traffic Plan for Boring DP-5

SOMA ENVIRONMENTAL ENGINEERING, INC.

- Proposed Borings
- Monitoring Wells Installed 12/07
- Monitoring Wells
- MPE wells installed in April 2009 and extraction wells installed in Nov 2009
- Soil Borings drilled July 2001
- Temporary Well Borehole Drilled by SOMA September 2003

FREEDOM AVENUE

FAIRMONT DRIVE

INTERSTATE 580

151 st AVENUE

MW-1D

MW-1

SB-4

DISPENSER ISLANDS

Former USTs

SB-1

MW-2

MW-3D

MW-3

SB-2

SB-3

MPE-2

Existing USTs

STATION BUILDING

MW-4

DISPENSER ISLANDS

SB-5

MW-4D

MPE-1

MW-5

35 MPH zone

rail

EX-1

Dead End

G20-2 (C14)

RESIDENTIAL AREA

~19'

DP-1

No Right Turn

EX-2

DP-2

MW-6

~85'

street light

W21-5 (C24)

~40'

min 13'

DP-3

G20-2 (C14)

~5.5'

~27'

DP-4

C23

parking lane

W21-5 (C24)

street light

DP-5

~45'

LIBERTY ST

152 nd AVENUE

parking lane

street light

TWB-2

MW-7

G20-2 (C14)

~93'

NOTES:
-Traffic sign spacing will be in accordance with the Chapter 6 of the Caltrans MUTCD with respect to the established speed limit of 35 MPH (or appropriate) in the vicinity of proposed work

parking lane

G20-2 (C14)

MW-8

C23

TWB-3

RESIDENTIAL AREA

C23	Road Work Ahead
G20-2 (C14)	End Road Work
W21-5 (C24)	Shoulder Work Ahead
R9-9	SIDEWALK CLOSED
R9-11	SIDEWALK CLOSED AHEAD CROSS HERE (w/ arrow))
R9-11a	SIDEWALK CLOSED CROSS HERE (w/ arrow)

TRAFFIC SIGN FACING RIGHT

CONES (BARICADE)

A FLAGGER, a trained individuall assisting with pedestrian crossing and traffic control

General Areas of Traffic Management

N

approximate scale in feet

0 50 100

Traffic Plan: MPE at MW-6

SOMA ENVIRONMENTAL ENGINEERING, INC.

Alameda County Public Works Agency - Water Resources Well Permit

399 Elmhurst Street
Hayward, CA 94544-1395
Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 06/01/2011 By jamesy

Permit Numbers: W2011-0354
Permits Valid from 07/13/2011 to 08/17/2011

Application Id:	1306264780007	**City of Project Site:**	San Leandro
Site Location:	15101 Freedom Avenue (off-site on corner of Fairmont Ave and 152nd Avenue)		
Project Start Date:	06/15/2011	**Completion Date:**	06/16/2011
Assigned Inspector:	Contact Steve Miller at (510) 670-5517 or stevem@acpwa.org		
Extension Start Date:	07/13/2011	**Extension End Date:**	08/17/2011
Extension Count:	1	**Extended By:**	priest
Applicant:	SOMA Environmental Engineering - Mansour Sepehr 6620 Owens Drive, Suite A, Pleasanton, CA 94588	**Phone:**	925-734-6400
Property Owner:	Farrokh Hosseinyoun 95 Belvedere St., Suite 1, San Rafael, CA 94901	**Phone:**	415-458-8600
Client:	Mohammad Pazdel 1770 Pistacia Court, Fairfield, CA 94533	**Phone:**	--
Contact:	Fisker Erica	**Phone:** **Cell:**	925-734-6400 925-989-8250

	Total Due:	$265.00
Receipt Number: WR2011-0156	**Total Amount Paid:**	$265.00
Payer Name : SOMA Environmental Engineering	Paid By: VISA	**PAID IN FULL**

Works Requesting Permits:

Borehole(s) for Investigation-Environmental/Monitorinig Study - 5 Boreholes
Driller: Gregg Drilling & Testing - Lic #: 485165 - Method: DP

Work Total: $265.00

Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2011-0354	06/01/2011	09/13/2011	5	2.75 in.	30.00 ft

Specific Work Permit Conditions

1. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site. The containers shall be clearly labeled to the ownership of the container and labeled hazardous or non-hazardous.

2. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.

3. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.

4. Applicant shall contact Steve Miller for an inspection time at (510) 670-5517 or email to stevem@acpwa.org at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24

hours prior to drilling.

5. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of $500.00.

6. Prior to any drilling activities onto any public right-of-ways, it shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits required for that City or to the County and follow all City or County Ordinances. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County a Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

7. Permit is valid only for the purpose specified herein. No changes in construction procedures, as described on this permit application. Boreholes shall not be converted to monitoring wells, without a permit application process.

Alameda County Public Works Agency - Water Resources Well Permit

399 Elmhurst Street
Hayward, CA 94544-1395
Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 06/01/2011 By jamesy

Permit Numbers: W2011-0354
Permits Valid from 06/15/2011 to 06/16/2011

Application Id:	1306264780007	**City of Project Site:** San Leandro
Site Location:	15101 Freedom Avenue (off-site on corner of Fairmont Ave and 152nd Avenue)	
Project Start Date:	06/15/2011	**Completion Date:** 06/16/2011
Assigned Inspector:	Contact Steve Miller at (510) 670-5517 or stevem@acpwa.org	
Applicant:	SOMA Environmental Engineering - Mansour Sepehr 6620 Owens Drive, Suite A, Pleasanton, CA 94588	**Phone:** 925-734-6400
Property Owner:	Farrokh Hosseinyoun 95 Belvedere St., Suite 1, San Rafael, CA 94901	**Phone:** 415-458-8600
Client:	Mohammad Pazdel 1770 Pistacia Court, Fairfield, CA 94533	**Phone:** --
Contact:	Fisker Erica	**Phone:** 925-734-6400 **Cell:** 925-989-8250

Total Due: $265.00
Receipt Number: WR2011-0156 **Total Amount Paid:** $265.00
Payer Name : SOMA Environmental Engineering Paid By: VISA **PAID IN FULL**

Works Requesting Permits:

Borehole(s) for Investigation-Environmental/Monitorinig Study - 5 Boreholes
Driller: Gregg Drilling & Testing - Lic #: 485165 - Method: DP

Work Total: $265.00

Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2011-0354	06/01/2011	09/13/2011	5	2.75 in.	30.00 ft

Specific Work Permit Conditions

1. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site. The containers shall be clearly labeled to the ownership of the container and labeled hazardous or non-hazardous.

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3. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.

4. Applicant shall contact Steve Miller for an inspection time at (510) 670-5517 or email to stevem@acpwa.org at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

5. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of $500.00.

6. Prior to any drilling activities onto any public right-of-ways, it shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits required for that City or to the County and follow all City or County Ordinances. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County a Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

7. Permit is valid only for the purpose specified herein. No changes in construction procedures, as described on this permit application. Boreholes shall not be converted to monitoring wells, without a permit application process.

PROGRAMS AND SERVICES

Well Standards Program

The Alameda County Public Works Agency, Water Resources is located at:
399 Elmhurst Street
Hayward, CA 94544
For Driving Directions or General Info, Please Contact 510-670-5480 or wells@acpwa.org
For Drilling Permit information and process contact James Yoo at
Phone: 510-670-6633
FAX: 510-782-1939
Email: Jamesy@acpwa.org

Alameda County Public Works is the administering agency of General Ordinance Code, Chapter 6.88 . The purpose of this chapter is to provide for the regulation of groundwater wells and exploratory holes as required by California Water Code. The provisions of these laws are administered and enforced by Alameda County Public Works Agency through its Well Standards Program.

Drilling Permit Jurisdictions in Alameda County: There are four jurisdictions in Alameda County.

Location: Agency with Jurisdiction Contact Number

Berkeley City of Berkeley Ph: 510-981-7460
Fax: 510-540-5672

Fremont, Newark, Union City Alameda County Water District Ph: 510-668-4460
Fax: 510-651-1760

Pleasanton, Dublin, Livermore, Sunol Zone 7 Water Agency Ph: 925-454-5000
Fax: 510-454-5728

The Alameda County Public Works Agency, Water Resources has the responsibility and authority to issue drilling permits and to enforce the County Water Well Ordinance 73-68. This jurisdiction covers the western Alameda County area of **Oakland**, **Alameda**,**Piedmont**, **Emeryville**, **Albany**, **San Leandro**, **San Lorenzo**, **Castro Valley**, and **Hayward** . The purpose of the drilling permits are to ensure that any new well or the destruction of wells, including geotechnical investigations and environmental sampling within the above jurisdiction and within Alameda County will not cause pollution or contamination of ground water or otherwise jeopardize the health, safety or welfare of the people of Alameda County.

Permits are required for all work pertaining to wells and exploratory holes at any depth within the jurisdiction of the Well Standards Program. A completed permit application *(30 Kb)** , along with a site map, should be submitted at least **ten (10) working days prior to the planned start of work**. Submittals should be sent to the address or fax number provided on the application form. When submitting an application via fax, please use a high resolution scan to retain legibility.

Fees
Beginning April 11, 2005 , the following fees shall apply:

A permit to construct, rehabilitate, or destroy wells, including cathodic protection wells, but excluding dewatering wells (*Horizontal hillside dewatering and dewatering for construction period only), shall cost $300.00 per well.

A permit to bore exploratory holes, including temporary test wells, shall cost $200 per site. A site includes the project parcel as well as any adjoining parcels.

Please make checks payable to: **Treasurer, County of Alameda**

Permit Fees are exempt to State & Federal Projects
Applicants shall submit a letter from the agency requesting the fee exemption.

Scheduling Work/Inspections:
Alameda County Public Works Agency (ACPWA), Water Resources Section requires scheduling and inspection of permitted work. All drilling activities must be scheduled in advance. Availability of inspections will vary from week to week and will come on a first come, first served bases. To ensure inspection availability on your desired or driller scheduled date, the following procedures are required:

Please contact **James Yoo at 510-670-6633** to schedule the inspection date and time (You must have drilling permit approved prior to scheduling).

Schedule the work as far in advance as possible (at least 5 days in advance); and confirm the scheduled drilling date(s) at least 24 hours prior to drilling.

Once the work has been scheduled, an ACPWA Inspector will coordinate the inspection requirements as well as how the Inspector can be reached if they are not at the site when Inspection is required. Expect for special circumstances given, all work will require the inspection to be conducted during the working hours of 8:30am to 2:30pm., Monday to Friday, excluding holidays.

Request for Permit Extension:
Permits are only valid from the start date to the completion date as stated on the drilling permit application and Conditions of Approval. To request an extension of a drilling permit application, applicants must request in writing prior to the completion date as set forth in the Conditions of Approval of the drilling permit application. Please send fax or email to Water Resources Section, Fax 510-782-1939 or email at wells@acpwa.org. There are no additional fees for permit extensions or for re-scheduling inspection dates. You may not extend your drilling permit dates beyond 90 days from the approval date of the permit application. **NO refunds** shall be given back after 90 days and the permit shall be deemed voided.

Cancel a Drilling Permit:
Applicants may cancel a drilling permit only in writing by mail, fax or email to Water Resources Section, Fax 510-782-1939 or email at wells@acpwa.org. If you do not cancel your drilling permit application before the drilling completion date or notify in writing within 90 days, Alameda County Public Works Agency, Water Resources Section may void the permit and No refunds may be given back.

Refunds/Service Charge:
A service charge of $25.00 dollars for the first check returned and $35.00 dollars for each subsequent check returned.

Applicants who cancel a drilling permit application **before** we issue the approved permit(s), will receive a **FULL** refund (at any amount) and will be mailed back within two weeks.

Applicants who cancel a drilling permit application **after** a permit has been issued will then be charged a service fee of $50.00 (fifty Dollars).

To collect the remaining funds will be determined by the amount of the refund to be refunded (see process below).

Board of Supervisors Minute Order, File No. 9763, dated January 9, 1996, gives blanket authority to the Auditor-Controller to process claims, from all County departments for the refund of fees which do not exceed $500 (Five Hundred Dollars)(with the exception of the County Clerk whose limit is $1,500).

Refunds over the amounts must be authorized by the Board of Supervisors Minute Order, File No. 9763 require specific approval by the Board of Supervisors. The forms to request for refunds under $500.00 (Five Hundred Dollars) are available at this office or any County Offices. If the amount is exceeded, a Board letter and Minute Order must accompany the claim. Applicant shall fill out the request form and the County Fiscal department will process the request.

Enforcement
Penalty. Any person who does any work for which a permit is required by this chapter and who fails to obtain a permit shall be guilty of a misdemeanor punishable by fine not exceeding Five Hundred Dollars ($500.00) or by imprisonment not exceeding six months, or by both such fine and imprisonment, and such person shall be deemed guilty of a separate offense for each and every day or portion thereof during which any such

violation is committed, continued, or permitted, and shall be subject to the same punishment as for the original offense. (Prior gen. code §3-160.6)

Enforcement actions will be determined by this office on a case-by-case basis
Drilling without a permit shall be the cost of the permit(s) and a fine of $500.00 (Five Hundred Dollars).

Well Completion Reports (State DWR-188 forms) must be filed with the Well Standards Program within 60 days of completing work. Staff will review the report, assign a state well number, and then forward it to the California Department of Water Resources (DWR). Drillers should not send completed reports to DWR directly. Failure to file a Well Completion Report or deliberate falsification of the information is a misdemeanor; it is also grounds for disciplinary action by the Contractors' State License Board. Also note that filed Well Completion Reports are considered private record protected by state law and can only be released to the well owner or those specifically authorized by government agencies.

See our website (www.acgov.org/pwa/wells/index.shtml) for links to additional forms.

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
ALEX BRISCOE, Director

ENVIRONMENTAL HEALTH DEPARTMENT
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

May 12, 2011

Mr. Mohammad Pazdel
1770 Pistacia Court
Fairfield, CA 94533

Mr. Hamid Khatirine
c/o Mr. Michael D. Liberty
3713 Century Drive
Campbell, CA 95008-3832

Subject: Site Characterization for Fuel Leak Case No. RO0000473 and GeoTracker Global ID T0600191157, ARCO, 15101 Freedom Avenue, San Leandro, CA 94578

Dear Mr. Pazdel and Mr. Khatirine:

Thank you for the recently submitted document entitled, "Workplan for Implementing a Limited Off-Site Investigation," dated March 3, 3011, which was prepared by SOMA Environmental Engineering, Inc. for the subject site. Alameda County Environmental Health (ACEH) staff has reviewed the case file including the above-mentioned report for the above-referenced site. SOMA proposes to install five direct-push borings to a depth of 30 feet bgs to determine the extent of the elevated concentrations of petroleum hydrocarbons detected in off-site groundwater monitoring well MW-6.

ACEH generally concurs with proposed scope of work, however, ACEH has some concerns regarding the proposed soil sampling. Therefore, the scope of work may be implemented provided that the modifications requested in the technical comments below are addressed and incorporated during the field implementation. Submittal of a revised Work Plan is not required unless an alternate scope of work outside that described in the Work Plan and technical comments below is proposed.

TECHNICAL COMMENTS

1. **Soil Sampling** – SOMA states that "[s]oil samples may be collected from areas of gross contamination of each boring for chemical analysis." ACEH recommends that soil samples are collected, not only in instances of gross contamination, but also changes in lithology, at the capillary fringe, and at the terminal depth of the boring.

INSPECTION REQUIREMENTS

- All encroachments authorized by this Permit shall be subject to inspection by a County representative.

- The planned inspections will be performed by the County office(s) designated below; **unless otherwise indicated, it shall ' be the Permittee's responsibility to notify the designated office(s) - prior to the start of the encroachment.**

_____	Case 1: -The work described in this Permit must be inspected and accepted by the County. Contact the Permit Inspection office at *670-6601* at least *24* hours in advance to arrange -for the required tests and inspections.
_____	Case 2: - The work described in this Permit must be inspected and accepted by the County. Contact Traffic Engineering at *670-6571* or *670-6469* at least *24* hours in advance to arrange for the required tests and inspections.
_____	Case 3: - Some or all of the work described *in this Permit must be inspected by the following representative of the County:
_____	Case 4: - Notification of the County is not required.

- If the face of this Permit is marked to indicate that the assigned County WO is open f or charges, a Job account will be opened and the assigned inspectors will charge the actual cost of all required tests and inspections against this account. All cost overruns must be resolved prior to close-out of this Permit. Any underruns will returned to the Permittee as soon as possible following the close out.

CAUTION!

Most traffic signals and some streetlights are connected to their power sources with underground wiring. Many signals are also wired to traffic detector loops buried in the roadway. None of these County-owned wiring runs are included in the Underground Service Alert (USA) review and marking processes.

If you intend to excavate the roadway right-of-way within 500' of a traffic signal, or wherever the streetlight wiring is underground, you must contact the County traffic signal maintenance Office for the necessary review and marking.

CALL ERIK DA YTON A T (510) 670-553 7,
A T LEAST 48 HRS. IN AD VANCE OF YO UR PLANNED DIG.

WARNING!

If you fail to notify -us - and dig through or damage our loops or wire runs - you will be charged for the cost of our emergency repairs ($200 - $500, or more)!

Revised 1/25/9

NOTIFICATION OF FIELDWORK ACTIVITIES

Please schedule and complete the fieldwork activities by the date specified below and provide ACEH with at least three (3) business days notification prior to conducting the fieldwork, including routine groundwater sampling.

TECHNICAL REPORT REQUEST

Please submit technical reports to ACEH (Attention: Paresh Khatri), according to the following schedule:

- **August 4, 2011** – Soil and Water Investigation Report
- **Due within 30 Days of Sampling** – Quarterly Remediation Report (2nd Quarter 2011)
- **Due within 30 Days of Sampling** – Quarterly Remediation Report (3rd Quarter 2011)
- **Due within 30 Days of Sampling** – Quarterly Remediation Report (4th Quarter 2011)
- **Due within 30 Days of Sampling** – Quarterly Remediation Report (1st Quarter 2012)

Thank you for your cooperation. Should you have any questions or concerns regarding this correspondence or your case, please call me at (510) 777-2478 or send me an electronic mail message at paresh.khatri@acgov.org.

Sincerely,

Digitally signed by Paresh C. Khatri
DN: cn=Paresh C. Khatri, o=Alameda County Environmetal Health Department, ou, email=paresh.khatri@acgov.org, c=US
Date: 2011.05.12 08:43:24 -07'00'

Paresh C. Khatri
Hazardous Materials Specialist

Enclosure: Responsible Party(ies) Legal Requirements/Obligations
ACEH Electronic Report Upload (ftp) Instructions

cc: Mansour Sepehr, SOMA Environmental Engineering, 6620 Owens Dr., Ste A, Pleasanton, CA 94588 (*Sent via E-mail to: msepehr@somaenv.com*)
Donna Drogos, ACEH (*Sent via E-mail to: donna.drogos@acgov.org*)
Paresh Khatri, ACEH (*Sent via E-mail to: paresh.khatri@acgov.org*)
GeoTracker
File

Responsible Party(ies) Legal Requirements/Obligations

REPORT REQUESTS

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

ELECTRONIC SUBMITTAL OF REPORTS

ACEH's Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of reports in electronic form. The electronic copy replaces paper copies and is expected to be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program FTP site are provided on the attached "Electronic Report Upload Instructions." Submission of reports to the Alameda County FTP site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) GeoTracker website. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for all groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitoring wells, and other data to the GeoTracker database over the Internet. Beginning July 1, 2005, these same reporting requirements were added to Spills, Leaks, Investigations, and Cleanup (SLIC) sites. Beginning July 1, 2005, electronic submittal of a complete copy of all reports for all sites is required in GeoTracker (in PDF format). Please visit the SWRCB website for more information on these requirements (http://www.swrcb.ca.gov/ust/electronic_submittal/report_rqmts.shtml.

PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

UNDERGROUND STORAGE TANK CLEANUP FUND

Please note that delays in investigation, later reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

AGENCY OVERSIGHT

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to $10,000 per day for each day of violation.

Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC)	**REVISION DATE:** July 20, 2010
	ISSUE DATE: July 5, 2005
	PREVIOUS REVISIONS: October 31, 2005; December 16, 2005; March 27, 2009; July 8, 2010
SECTION: Miscellaneous Administrative Topics & Procedures	**SUBJECT:** Electronic Report Upload (ftp) Instructions

The Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of all reports in electronic form to the county's ftp site. Paper copies of reports will no longer be accepted. The electronic copy replaces the paper copy and will be used for all public information requests, regulatory review, and compliance/enforcement activities.

REQUIREMENTS

- **Please do not submit reports as attachments to electronic mail.**
- Entire report including cover letter must be submitted to the ftp site as **a single portable document format (PDF) with no password protection**.
- It is **preferable** that reports be converted to PDF format from their original format, (e.g., Microsoft Word) rather than scanned.
- **Signature pages and perjury statements must be included and have either original or electronic signature.**
- **Do not password protect the document**. Once indexed and inserted into the correct electronic case file, the document will be secured in compliance with the County's current security standards and a password. **Documents with password protection will not be accepted**.
- Each page in the PDF document should be rotated in the direction that will make it easiest to read on a computer monitor.
- Reports must be named and saved using the following naming convention: RO#_Report Name_Year-Month-Date (e.g., RO#5555_WorkPlan_2005-06-14)

Submission Instructions

1) Obtain User Name and Password:
   a) Contact the Alameda County Environmental Health Department to obtain a User Name and Password to upload files to the ftp site.
      i) Send an e-mail to dehloptoxic@acgov.org
   b) In the subject line of your request, be sure to include **"ftp PASSWORD REQUEST"** and in the body of your request, include the **Contact Information, Site Addresses**, and the **Case Numbers (RO# available in Geotracker) you will be posting for**.

2) Upload Files to the ftp Site
   a) Using Internet Explorer (IE4+), go to ftp://alcoftp1.acgov.org
      (i) Note: Netscape, Safari, and Firefox browsers will not open the FTP site.
   b) Click on Page located on the Command bar on upper right side of window, and then scroll down to Open FTP Site in Windows Explorer.
   c) Enter your User Name and Password. (Note: Both are Case Sensitive.)
   d) Open "My Computer" on your computer and navigate to the file(s) you wish to upload to the ftp site.
   e) With both "My Computer" and the ftp site open in separate windows, drag and drop the file(s) from "My Computer" to the ftp window.

3) Send E-mail Notifications to the Environmental Cleanup Oversight Programs
   a) Send email to dehloptoxic@acgov.org notify us that you have placed a report on our ftp site.
   b) Copy your Caseworker on the e-mail. Your Caseworker's e-mail address is the entire first name then a period and entire last name @acgov.org. (e.g., firstname.lastname@acgov.org)
   c) The subject line of the e-mail must start with the RO# followed by **Report Upload**. (e.g., Subject: RO1234 Report Upload) If site is a new case without an RO#, use the street address instead.
   d) If your document meets the above requirements and you follow the submission instructions, you will receive a notification by email indicating that your document was successfully uploaded to the ftp site.

APPENDIX C
Boring Logs

SOMA ENVIRONMENTAL ENGINEERING, INC.

GEOLOGIC LOG OF BOREHOLE: DP-1

PROJECT: 2552

DATE DRILLED: July 20, 2011

SITE LOCATION: 15101 Freedom Ave., San Leandro

CASING ELEVATION: NA

DRILLER: Gregg Drilling & Testing

First Encountered GW: 26.5 ft
Stablized GW: 18 ft

DRILLING METHOD: Direct Push

T.O.C. TO SCREEN: NA

BORING DIAMETER: 2-inch

SCREEN LENGTH: NA

LOGGED BY: E. Hightower

APPROVED BY: M. Sepehr

PID ppm	DEPTH	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	SAMPLED: SPLIT SPOON / CORE	GW LEVEL	BLOWCOUNTS	WELL DIAGRAM
3.4			CL	Hand Auger to 5 ft SANDY LEAN CLAY: Dark brown, moist, ~30% fine- to medium-grained sand, ~70% clay with high dry strength, no dilatancy, medium toughness, medium plasticity, soft, no HCl reaction, no Petroleum Hydrocarbon (PHC) odor				
2.1	5		SC	CLAYEY SAND: Brown, moist, ~70% fine- to medium-grained sand, ~30% clay with medium dry strength, no dilatancy, medium toughness, soft, no HCl reaction, no PHC odor				
0.5			SM	SILTY SAND with gravel: Brown, moist, ~60% fine- to medium-grained sand, ~15% subangular to subrounded gravel up to 1-inch, ~25% silty with low dry strength, slow dilatancy, low toughness, CaCO3 nodules with strong HCl reaction, nonplastic, no PHC odor.				
	10							
0.7			SC	CLAYEY SAND: Brown, moist, ~70% fine- to medium-grained sand, ~30% clay with medium dry strength, no dilatancy, medium toughness, soft, no HCl reaction, no PHC odor				
			SW	WELL-GRADED SAND with gravel: Brownish-gray, moist, fine- to coarse-grained sand, ~10% subangular to subrounded gravel, strong HCl reaction, no PHC odor				
2.7	15		CL	SANDY LEAN CLAY: Brown, moist, ~40% fine- to medium-grained sand, ~60% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, strong HCl reaction, no PHC odor.				
1.3			SW	WELL-GRADED SAND: Greenish-gray, moist to very moist, fine- to coarse-grained sand, strong PHC odor at 20 ft.				
176	20		SC	CLAYEY SAND: Greenish-gray, moist to very moist, ~70% fine- to medium-grained sand, ~30% clay with medium dry strength, no dilatancy, medium toughness, soft, no HCl reaction, strong PHC odor				
220			CL	SANDY LEAN CLAY: Greenish-gray with some brown mottling, moist, ~40% fine- to medium-grained sand, ~60% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, strong HCl reaction, slight PHC odor.				
143	25							

COMMENTS: TD @ 30 ft

ENVIRONMENTAL ENGINEERING, INC.

GEOLOGIC LOG OF BOREHOLE: DP-1

PROJECT: 2552

DATE DRILLED: July 20, 2011

SITE LOCATION: 15101 Freedom Ave., San Leandro

CASING ELEVATION: NA

DRILLER: Gregg Drilling & Testing

First Encountered GW: 26.5 ft
Stablized GW: 18 ft

DRILLING METHOD: Direct Push

T.O.C. TO SCREEN: NA

BORING DIAMETER: 2-inch

SCREEN LENGTH: NA

LOGGED BY: E. Hightower

APPROVED BY: M. Sepehr

PID ppm	DEPTH	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	SAMPLED: SPLIT SPOON	SAMPLED: CORE	GW LEVEL	BLOWCOUNTS	WELL DIAGRAM
1.7			CL	SANDY LEAN CLAY: Greenish-gray with some brown mottling, moist, ~40% fine- to medium-grained sand, ~60% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, strong HCl reaction, slight PHC odor.			▽		
5.9	30		SC	CLAYEY SAND: Greenish-gray, wet to saturated, ~70% fine- to coarse-grained sand, ~30% clay with medium dry strength, no dilatancy, medium toughness, soft, no HCl reaction, no PHC odor		X			
	35								
	40								
	45								
	50								

COMMENTS: TD @ 30 ft

ENVIRONMENTAL ENGINEERING, INC.

GEOLOGIC LOG OF BOREHOLE: DP-2

PROJECT: 2552

DATE DRILLED: July 20, 2011

SITE LOCATION: 15101 Freedom Ave., San Leandro

CASING ELEVATION: NA

DRILLER: Gregg Drilling & Testing

First Encountered GW: 24 ft
Stablized GW: 19 ft

DRILLING METHOD: Direct Push

T.O.C. TO SCREEN: NA

BORING DIAMETER: 2-inch

SCREEN LENGTH: NA

LOGGED BY: E. Hightower

APPROVED BY: M. Sepehr

PID ppm	DEPTH	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	SAMPLED: SPLIT SPOON / CORE	GW LEVEL	BLOWCOUNTS	WELL DIAGRAM
			A/C	3 inches asphalt				
0.0			CL	Hand Auger to 5 ft SANDY LEAN CLAY: Black, moist, ~30% fine- to medium-grained sand, ~70% clay with high dry strength, no dilatancy, medium toughness, medium to high plasticity, soft, no HCl reaction, no Petroleum Hydrocarbon (PHC) odor				
	5			As above: Dark brown, moist, some gravel, no PHC odor.				
0.0			SC	CLAYEY SAND: Greenish-brown, moist, ~70% fine- to medium-grained sand, ~30% clay with medium dry strength, no dilatancy, medium toughness, firm, no HCl reaction, no PHC odor	X			
	10				X			
0.0			CL	SANDY LEAN CLAY: Brown, moist, ~40% fine- to medium-grained sand, ~60% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, hard, no HCl reaction, no PHC odor.				
	15							
0.0			SC	CLAYEY SAND: Greyish-brown, moist, ~70% fine- to medium-grained sand, ~30% clay with medium dry strength, no dilatancy, medium toughness, firm, no HCl reaction, no PHC odor, some gravel (<5%)		▼		
0.0			CL	SANDY LEAN CLAY: Brown, moist, ~40% fine- to medium-grained sand, ~60% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, no HCl reaction, no PHC odor.				
	20		SC	CLAYEY SAND: Brown, moist, ~70% fine- to medium-grained sand, ~30% clay with medium dry strength, no dilatancy, medium toughness, firm, no HCl reaction, no PHC odor	X			
60.6			CL	SANDY LEAN CLAY: Brown, moist, ~40% fine- to medium-grained sand, ~60% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, no HCl reaction, becomes green with PHC odor at 23 ft				
156.5			SC	CLAYEY SAND: Brown, saturated, ~70% fine- to medium-grained sand, ~30% clay with medium dry strength, no dilatancy, medium toughness, firm, no HCl reaction, PHC odor	X	▽		
	25							

COMMENTS: TD @ 30 ft

ENVIRONMENTAL ENGINEERING, INC.

GEOLOGIC LOG OF BOREHOLE: DP-2

PROJECT: 2552

DATE DRILLED: July 20, 2011

SITE LOCATION: 15101 Freedom Ave., San Leandro

CASING ELEVATION: NA

DRILLER: Gregg Drilling & Testing

First Encountered GW: 24 ft
Stablized GW: 19 ft

DRILLING METHOD: Direct Push

T.O.C. TO SCREEN: NA

BORING DIAMETER: 2-inch

SCREEN LENGTH: NA

LOGGED BY: E. Hightower

APPROVED BY: M. Sepehr

PID ppm	DEPTH	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	SAMPLED: SPLIT SPOON	SAMPLED: CORE	GW LEVEL	BLOWCOUNTS	WELL DIAGRAM
4.8			SC	CLAYEY SAND: Brown, saturated to 25.5 ft, ~70% fine- to medium-grained sand, ~30% clay with medium dry strength, no dilatancy, medium toughness, firm, no HCl reaction, slight PHC odor					
			CL	SANDY LEAN CLAY: Brown, moist, ~40% fine- to medium-grained sand, ~60% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, no HCl reaction, slight PHC odor		X			
43.1			SC	CLAYEY SAND: Greyish-brown, wet to saturated, ~70% fine- to coarse-grained sand, ~30% clay with medium dry stregth, no dilatancy, medium toughness, soft, no HCl reaction, slight PHC odor		X			
	30								
	35								
	40								
	45								
	50								

COMMENTS: TD @ 30 ft

SOMA ENVIRONMENTAL ENGINEERING, INC.

GEOLOGIC LOG OF BOREHOLE: DP-3

PROJECT: 2552

DATE DRILLED: July 21, 2011

SITE LOCATION: 15101 Freedom Ave., San Leandro

CASING ELEVATION: NA

DRILLER: Gregg Drilling & Testing

First Encountered GW: 22 ft
Stablized GW: 18 ft

DRILLING METHOD: Direct Push

T.O.C. TO SCREEN: NA

BORING DIAMETER: 2-inch

SCREEN LENGTH: NA

LOGGED BY: E. Hightower

APPROVED BY: M. Sepehr

PID ppm	DEPTH	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	SAMPLED: SPLIT SPOON / CORE	GW LEVEL	BLOWCOUNTS	WELL DIAGRAM
			A/C	6 inches asphalt				
1.7			CL	Hand Auger to 5 ft (~2 ft base rock - sandy gravel) SANDY LEAN CLAY: Black, moist, ~30% fine- to medium-grained sand, ~70% clay with high dry strength, no dilatancy, medium toughness, medium to high plasticity, soft, no HCl reaction, no Petroleum Hydrocarbon (PHC) odor				
0.0	5		SC	CLAYEY SAND: Brown, moist, ~70% fine- to medium-grained sand, ~30% clay with medium dry strength, no dilatancy, medium toughness, firm, strong HCl reaction, no PHC odor	X			
				As above: moist, no PHC odor, some subangular to subrounded gravel up to 1/2-inch				
0.0	10			As above: moist, HCl reaction	X			
5.5	15		CL	SANDY LEAN CLAY: Brown, moist, ~40% fine- to medium-grained sand, ~60% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, soft, slight HCl reaction, no PHC odor.				
				No Recovery- sample liner stuck in tube		▼		
7.7	20		CL	SANDY LEAN CLAY: Greenish-brown, moist (very moist @ 22 ft), ~40% fine- to medium-grained sand, ~60% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, strong HCl reaction, slight PHC odor	X X			
0.0			SC	CLAYEY SAND: Greenish-brown, saturated, ~70% fine- to medium-grained sand, ~30% clay with medium dry strength, no dilatancy, medium toughness, soft, slight HCl reaction, slight PHC odor		▽		
0.0	25			As above: very moist to wet, slight PHC odor				

COMMENTS: TD @ 30 ft

ENVIRONMENTAL ENGINEERING, INC.

GEOLOGIC LOG OF BOREHOLE: DP-3

PROJECT: 2552

DATE DRILLED: July 21, 2011

SITE LOCATION: 15101 Freedom Ave., San Leandro

CASING ELEVATION: NA

DRILLER: Gregg Drilling & Testing

First Encountered GW: 22 ft
Stablized GW: 18 ft

DRILLING METHOD: Direct Push

T.O.C. TO SCREEN: NA

BORING DIAMETER: 2-inch

SCREEN LENGTH: NA

LOGGED BY: E. Hightower

APPROVED BY: M. Sepehr

PID ppm	DEPTH	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	SAMPLED: SPLIT SPOON	SAMPLED: CORE	GW LEVEL	BLOWCOUNTS	WELL DIAGRAM
0.0 0.5	30		SC	CLAYEY SAND: Brown, moist to wet, ~70% fine- to medium-grained sand, ~30% clay with medium dry strength, no dilatancy, medium toughness, soft, slight HCl reaction, slight PHC odor As above: moist to wet, large $CaCO_3$ nodules		X			

35

40

45

50

COMMENTS: TD @ 30 ft

ENVIRONMENTAL ENGINEERING, INC.

GEOLOGIC LOG OF BOREHOLE: DP-4

PROJECT: 2552

DATE DRILLED: July 21, 2011

SITE LOCATION: 15101 Freedom Ave., San Leandro

CASING ELEVATION: NA

DRILLER: Gregg Drilling & Testing

First Encountered GW: 20 ft
Stablized GW: 15.90 ft

DRILLING METHOD: Direct Push

T.O.C. TO SCREEN: NA

BORING DIAMETER: 2-inch

SCREEN LENGTH: NA

LOGGED BY: E. Hightower

APPROVED BY: M. Sepehr

PID ppm	DEPTH	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	SAMPLED: SPLIT SPOON	SAMPLED: CORE	GW LEVEL	BLOWCOUNTS	WELL DIAGRAM
0.4			A/C	4 inches concrete					
			SW	Hand Auger to 5 ft WELL-GRADED SAND (fill): Brown, moist, fine- to coarse-grained sand, no Petroleum Hydrocarbon (PHC) odor					
0.0	5		CL	SANDY LEAN CLAY: Black, moist, ~30% fine- to medium-grained sand, ~70% clay with high dry strength, no dilatancy, medium toughness, medium to high plasticity, soft, no HCl reaction, no PHC odor					
0.0				As above: moist, slight HCl reaction, no PHC odor		X			
0.0	10		SC	CLAYEY SAND: Olive-green, moist, ~70% fine- to coarse-grained sand, ~30% clay with medium dry strength, no dilatancy, medium toughness, firm, no HCl reaction, no PHC odor, some gravel		X			
				As above: moist, no PHC odor					
0.0	15		CL	SANDY LEAN CLAY: Greenish-brown, moist, ~40% fine- to medium-grained sand, ~60% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, soft, CaCO3 nodules with HCl reaction @ 16 ft, no PHC odor.		X	▼		
45.8	20			As above: very moist to wet, slight PHC odor		X	▽		
1.2				As above: very moist to wet, PHC odor					
180.9									
195.5	25			As above: moist, slight PHC odor		X			

COMMENTS: TD @ 30 ft

ENVIRONMENTAL ENGINEERING, INC.

GEOLOGIC LOG OF BOREHOLE: DP-4

PROJECT: 2552

DATE DRILLED: July 21, 2011

SITE LOCATION: 15101 Freedom Ave., San Leandro

CASING ELEVATION: NA

DRILLER: Gregg Drilling & Testing

First Encountered GW: 20 ft
Stablized GW: 15.90 ft

DRILLING METHOD: Direct Push

T.O.C. TO SCREEN: NA

BORING DIAMETER: 2-inch

SCREEN LENGTH: NA

LOGGED BY: E. Hightower

APPROVED BY: M. Sepehr

PID ppm	DEPTH	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	SAMPLED: SPLIT SPOON	SAMPLED: CORE	GW LEVEL	BLOWCOUNTS	WELL DIAGRAM
142.9			CL	SANDY LEAN CLAY: Greenish-brown, very moist to wet, ~40% fine- to medium-grained sand, ~60% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, soft, no HCl reaction, PHC odor		X			
0.0	30		SC	CLAYEY SAND: Brown, wet to saturated, ~70% fine- to medium-grained sand, ~30% clay with medium dry strength, no dilatancy, medium toughness, firm, no HCl reaction, slight PHC odor		X			
	35								
	40								
	45								
	50								

COMMENTS: TD @ 30 ft

SOMA ENVIRONMENTAL ENGINEERING, INC.

GEOLOGIC LOG OF BOREHOLE: DP-5

PROJECT: 2552

DATE DRILLED: July 20, 2011

SITE LOCATION: 15101 Freedom Ave., San Leandro

CASING ELEVATION: NA

DRILLER: Gregg Drilling & Testing

First Encountered GW: 21 ft
Stablized GW: 16 ft

DRILLING METHOD: Direct Push

T.O.C. TO SCREEN: NA

BORING DIAMETER: 2-inch

SCREEN LENGTH: NA

LOGGED BY: E. Hightower

APPROVED BY: M. Sepehr

PID ppm	DEPTH	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	SAMPLED: SPLIT SPOON	SAMPLED: CORE	GW LEVEL	BLOWCOUNTS	WELL DIAGRAM
			A/C	6 inches asphalt					
			CL	Hand Auger to 5 ft SANDY LEAN CLAY: Black, moist, ~30% fine- to medium-grained sand, ~70% clay with high dry strength, no dilatancy, medium toughness, medium to high plasticity, soft, no HCl reaction, no PHC odor					
0.0									
0.0	5			As above: moist, some CaCO3 nodules with strong HCl reaction, no PHC odor					
0.4				As above: olive-green, moist, no PHC odor		X			
0.0	10		SC	CLAYEY SAND: Olive-green, moist, ~70% fine- to coarse-grained sand, ~30% clay with medium dry stregth, no dilatancy, medium toughness, firm, no HCl reaction, no PHC odor, some gravel		X			
1.1			SW	WELL-GRADED SAND: Greenish-brownish, moist, fine- to coarse-grained sand, no HCl reaction, no PHC odor, some gravel		X			
			CL	SANDY LEAN CLAY: Brown, moist, ~40% fine- to medium-grained sand, ~60% clay with medium dry strength, slow dilatancy, medium toughness, medium plasticity, very hard, no HCl reaction, no PHC odor, some gravel					
0.0	15						▼		
0.0				As above: moist, hard, slight PHC odor					
0.0	20		SC	CLAYEY SAND: Brown, moist (wet lens from 21-22 ft), ~70% fine- to coarse-grained sand, ~30% clay with medium dry stregth, no dilatancy, medium toughness, firm, no HCl reaction, slight PHC odor begins at 21 ft, some gravel			▽		
26.5									
65.7						X			
96.2				As above: saturated, PHC odor					
	25								

COMMENTS: TD @ 30 ft

PROJECT: 2552

DATE DRILLED: July 20, 2011

SITE LOCATION: 15101 Freedom Ave., San Leandro

CASING ELEVATION: NA

DRILLER: Gregg Drilling & Testing

First Encountered GW: 21 ft
Stablized GW: 16 ft

DRILLING METHOD: Direct Push

T.O.C. TO SCREEN: NA

BORING DIAMETER: 2-inch

SCREEN LENGTH: NA

LOGGED BY: E. Hightower

APPROVED BY: M. Sepehr

PID ppm	DEPTH	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	SAMPLED: SPLIT SPOON	SAMPLED: CORE	GW LEVEL	BLOWCOUNTS	WELL DIAGRAM
9.9			SC	CLAYEY SAND: Brown, saturated, ~70% fine- to coarse-grained sand, ~30% clay with medium dry strength, no dilatancy, medium toughness, firm, no HCl reaction, slight PHC odor, some gravel (<5%)					
6.8				As above: saturated to wet		X			
	30					X			
	35								
	40								
	45								
	50								

COMMENTS: TD @ 30 ft

ENVIRONMENTAL ENGINEERING, INC.

GEOLOGIC LOG OF BOREHOLE MW-6

BORING LOCATION

SEE SITE MAP

PROJECT: 2552

SITE LOCATION: Intersection of 152-nd and Liberty St.

DRILLING METHOD: HSA

DRILLER: Gregg Drilling & Testing. (Jason)

LOGGED BY: E Jennings

DATE DRILLED: August 25, 2004

CASING ELEVATION: NA

DEPTH TO 1ST GW: 16 ft bgs

APPROVED BY: R. Papler R.G.

PID ppm	DEPTH	GRAPHIC LOG	SOIL CLASS.	GEOLOGIC DESCRIPTION	SAMPLED (core / split spoon)	BLOWCOUNTS	GW LEVEL	WELL DIAGRAM
				6-7" Asphalt over 15" Baserock	HAND AUGERED TO 5'			CEMENT GROUT
			CL	SILTY CLAY: dark gray becoming medium dark brownish gray w/ depth, med. stiff to stiff, moist, high plasticity; Low estimated permeability (LEK). Slight petroleum hydrocarbon (PHC) odor.				
0	5		CL	SILTY CLAY with some Sand and Gravel: light gray brown becoming gray brown below 8', stiff, damp, becoming moist below 8'; <15% very fine sand and gravel with some caliche; Low estimated permeability (LEK). No petroleum hydrocarbon (PHC) odor.	No recov.			BENTONITE SEAL
0	10		SP/SW	SAND interbedded with GRAVELLY SAND: olive gray, med dense; moist to very moist becoming wet below 16'; fine to coarse sand with < 20% subangular to subrounded gravel to 1"; High estimated permeability (HEK). No PHC odor.				4" SCHEDULE 40 PVC WELL CASING
10	15			As above with moderate PHC odor.			▽	0.02 SLOTTED SCREEN
307			CL/SC	SANDY CLAY/ CLAYEY SAND w/ some Gravel: olive gray, med. stiff, very moist; 40-60% very fine to fine sand w/ <15% subangular to subrounded gravel to 1 1/2"; MEK-HEK. Moderate to strong PHC odor.			▼	2/12 SAND
442	20		SW	SAND w/ some Gravel: olive gray, med. dense, moist becoming wet, fine to coarse sand w/ < 10% subrounded gravel to 3/4"; HEK. Strong PHC odor.			▽	
255	25							

ENVIRONMENTAL ENGINEERING, INC.

GEOLOGIC LOG OF BOREHOLE MW-6

BORING LOCATION

SEE SITE MAP

PROJECT: 2552

SITE LOCATION: Intersection of 152-nd and Liberty St.

DRILLING METHOD: HSA

DRILLER: Gregg Drilling & Testing. (Jason)

LOGGED BY: E Jennings

DATE DRILLED: August 25, 2004

CASING ELEVATION: NA

DEPTH TO 1ST GW: 16 ft bgs

APPROVED BY: R. Papler R.G.

PID ppm	DEPTH	GRAPHIC LOG	SOIL CLASS.	GEOLOGIC DESCRIPTION	SAMPLED (core / split spoon)	BLOWCOUNTS	GW LEVEL	WELL DIAGRAM
653			GW	SANDY GRAVEL: gray, med. dense, wet, fine to coarse; HEK. Strong PHC odor.				0.02 SLOTTED SCREEN / BENTONITE PLUG
			CL	SILTY CLAY: olive gray and gray brown, very stiff to hard, damp to moist, high plasticity; LEK. Slight PHC odor.				
				Total depth: 28 ft bgs Borehole plugged to 27' Groundwater first encountered at 16 ft bgs then 20 ft bgs and later stabilized at 17.64 ft below toc (21 September 2004).				

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APPENDIX D
Waste Manifest

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
EXEMPT	1	510-749-1390	61740-SL

GENERATOR

5. Generator's Name and Mailing Address
GAS & FOOD
1770 PISTACIA CT
FAIRFIELD CA 94533
Generator's Phone: 510 481-2839

Generator's Site Address (if different than mailing address)
GAS & FOOD
15181 FREEDOM AVE
SAN LEANDRO CA 94578

6. Transporter 1 Company Name: NRC ENVIRONMENTAL SERVICES INC — U.S. EPA ID Number: CAR000030111

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address
Crosby & Overton, Inc
1630 W. 17th Street
Long Beach CA 90813
Facility's Phone: 562 432-5445
U.S. EPA ID Number: CAD028409819

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON HAZARDOUS WASTE SOLID (SOIL CUTTINGS)	1	DM	600	P	
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information
WEAR APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT
JOB#/PO# 61740 3CMA #2552 PROFILE # 51544
CONSULTANT: 3CMA ENVIRONMENTAL 6620 OWENS DRIVE, SUITE A, PLEASANTON, CA

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name	Signature	Month	Day	Year
Elena Mauzo		08	25	11

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name	Signature	Month	Day	Year
Thom SAMA		08	25	11
Transporter 2 Printed/Typed Name	Signature	Month	Day	Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator)	Month	Day	Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name	Signature	Month	Day	Year

APPENDIX E
Laboratory Analytical Report

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 229640
ANALYTICAL REPORT

SOMA Environmental Engineering Inc.
6620 Owens Dr.
Pleasanton, CA 94588

Project : 2552
Location : 15101 Freedom Avenue
Level : II

Sample ID	Lab ID	Sample ID	Lab ID
DP-1@6.5FT	229640-001	DP-4@11FT	229640-019
DP-1@16FT	229640-002	DP-4@16FT	229640-020
DP-1@20FT	229640-003	DP-4@20FT	229640-021
DP-1@22FT	229640-004	DP-4@24FT	229640-022
DP-1@23FT	229640-005	DP-4@26FT	229640-023
DP-1@30FT	229640-006	DP-4@30FT	229640-024
DP-2@8FT	229640-007	DP-5@7.5FT	229640-025
DP-2@10FT	229640-008	DP-5@10.5FT	229640-026
DP-2@20FT	229640-009	DP-5@12.5FT	229640-027
DP-2@24FT	229640-010	DP-5@23FT	229640-028
DP-2@28FT	229640-011	DP-5@28FT	229640-029
DP-2@30FT	229640-012	DP-5@30FT	229640-030
DP-3@6FT	229640-013	DP-1	229640-031
DP-3@12FT	229640-014	DP-2	229640-032
DP-3@20FT	229640-015	DP-3	229640-033
DP-3@21FT	229640-016	DP-4	229640-034
DP-3@30FT	229640-017	DP-5	229640-035
DP-4@8FT	229640-018		

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

Signature: Trig Bolton
Project Manager

Date: 08/04/2011

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**229640**
Client:	**SOMA Environmental Engineering Inc.**
Project:	**2552**
Location:	**15101 Freedom Avenue**
Request Date:	**07/22/11**
Samples Received:	**07/22/11**

This data package contains sample and QC results for thirty soil samples and five water samples, requested for the above referenced project on 07/22/11. The samples were received cold and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B):
Matrix spikes were not performed for this analysis in batch 177261 due to insufficient sample amount. No other analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B) Water:
A number of samples had pH greater than 2. No other analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B) Soil:
Low response was observed for tert-butyl alcohol (TBA) in the CCV analyzed 07/28/11 13:41; this analyte met minimum response criteria, and affected data was qualified with "b". Low responses were observed for 1,2-dichloroethane and tert-butyl alcohol (TBA) in the CCV analyzed 07/31/11 15:15; these analytes met minimum response criteria, and affected data was qualified with "b". Low response was observed for tert-butyl alcohol (TBA) in the CCV analyzed 07/27/11 14:46; this analyte met minimum response criteria, and affected data was qualified with "b". Low response was observed for tert-butyl alcohol (TBA) in the CCV analyzed 07/27/11 11:29; this analyte met minimum response criteria, and affected data was qualified with "b". Matrix spikes QC601944,QC601945 (batch 177237) were not reported because the concentrations of target analytes in the parent sample were more than four times the amount spiked, rendering spike recoveries not meaningful. Matrix spikes were not performed for this analysis in batch 177322 due to limited sample volume or interferences from the solvent in sample dilutions. Low recoveries were observed for isopropyl ether (DIPE), MTBE, and tert-butyl alcohol (TBA) in the MS of DP-2@24FT (lab # 229640-010); the LCS was within limits, and the associated RPDs were within limits. Low recovery was observed for tert-butyl alcohol (TBA) in the MSD of DP-2@28FT (lab # 229640-011); the LCS was within limits, and the associated RPD was within limits. High recovery was observed for ethylbenzene in the MS of DP-2@28FT (lab # 229640-011); the LCS was within limits, and the associated RPD was within limits. Low recoveries were observed for a number of analytes in the MS/MSD of DP-5@7.5FT (lab # 229640-025); the LCS was within limits, and the associated RPDs were within limits. High surrogate recovery was observed for 1,2-dichloroethane-d4 in the MS of DP-1@6.5FT (lab # 229640-001). No other analytical problems were encountered.

CHAIN OF CUSTODY

Curtis & Tompkins, Ltd
Analytical Laboratory Since 1878
2323 Fifth Street
Berkeley, CA 94710
(510)486-0900 Phone
(510)486-0532 Fax

LOGIN # 229640

Sampler: Lizzie Hightower

Project No: 2552

Report To: Joyce Bobek

Project Name:15101 Freedom Ave.,San Leandr

Company : SOMA Environmental

Turnaround Time: Standard

Telephone: 925-734-6400

Fax: 925-734-6401

Lab No.	Sample ID.	Sampling Date Time	Matrix: Soil	Water	Waste	# of Containers	Preservative: HCL	H_2SO_4	HNO_3	ICE	
1	DP-1@6.5ft	7/20/11 9:55	*			6" Sleeve				*	
2	DP-1@16ft	7/20/11 10:19	*			6" Sleeve				*	
3	DP-1@20ft	7/20/11 10:28	*			6" Sleeve				*	
4	DP-1@22ft	7/20/11 10:41	*			6" Sleeve				*	
5	DP-1@23ft	7/20/11 10:49	*			6" Sleeve				*	
6	DP-1@30ft	7/20/11 11:02	*			6" Sleeve				*	
7	DP-2@8ft	7/20/11 15:39	*			6" Sleeve				*	
8	DP-2@10ft	7/20/11 15:52	*			6" Sleeve				*	
9	DP-2@20ft	7/20/11 17:19	*			6" Sleeve				*	
10	DP-2@24ft	7/20/11 17:24	*			6" Sleeve				*	
11	DP-2@28ft	7/20/11 17:35	*			6" Sleeve				*	
12	DP-2@30ft	7/20/11 17:42	*			6" Sleeve				*	
13	DP-3@6ft	7/21/11 9:33	*			6" Sleeve				*	

Analyses

TPHg EPA 8015	Gasoline Oxygenates & Lead Scavengers (including TBA, TAME, ETBE, DIPE, 1,2-DCA, EDB), Ethanol	BTEX, MtBE 8260B										
*	*	*										
*	*	*										
*	*	*										
*	*	*										
*	*	*										
*	*	*										
*	*	*										
*	*	*										
*	*	*										
*	*	*										
*	*	*										
*	*	*										
*	*	*										

Notes: **EDF OUTPUT REQUIRED**

RELINQUISHED BY:

E. Hightower 7/22/11 07:30 DATE/TIME

Rudi Mathes 7/22/11 10:40 DATE/TIME

DATE/TIME

RECEIVED BY:

Rudi Mathes 7/22/11 8:30 DATE/TIME

[signature] 7/22/11 1040 DATE/TIME

DATE/TIME

CHAIN OF CUSTODY

Curtis & Tompkins, Ltd
Analytical Laboratory Since 1878
2323 Fifth Street
Berkeley, CA 94710
(510)486-0900 Phone
(510)486-0532 Fax

LOGIN # 229640

Sampler: Lizzie Hightower

Project No: 2552

Report To: Joyce Bobek

Project Name:15101 Freedom Ave.,San Leandr **Company :** SOMA Environmental

Turnaround Time: Standard

Telephone: 925-734-6400

Fax: 925-734-6401

Lab No.	Sample ID.	Sampling Date Time	Matrix: Soil	Matrix: Water	Matrix: Waste	# of Containers	Preservative: HCL	Preservative: H_2SO_4	Preservative: HNO_3	Preservative: ICE	Analyses: TPHg EPA 8015	Analyses: Gasoline Oxygenates & Lead Scavengers (including TBA, TAME, ETBE, DIPE, 1,2-DCA, EDB), Ethanol	Analyses: BTEX, MtBE 8260B
14	DP-3@12ft	7/21/11 9:37	*			6" Sleeve				*	*	*	*
15	DP-3@20ft	7/21/11 9:51	*			6" Sleeve				*	*	*	*
16	DP-3@21ft	7/21/11 9:53	*			6" Sleeve				*	*	*	*
17	DP-3@30ft	7/21/11 10:04	*			6" Sleeve				*	*	*	*
18	DP-4@8ft	7/21/11 10:39	*			6" Sleeve				*	*	*	*
19	DP-4@11ft	7/21/11 10:48	*			6" Sleeve				*	*	*	*
20	DP-4@16ft	7/21/11 10:58	*			6" Sleeve				*	*	*	*
21	DP-4@20ft	7/21/11 11:03	*			6" Sleeve				*	*	*	*
22	DP-4@24ft	7/21/11 11:19	*			6" Sleeve				*	*	*	*
23	DP-4@26ft	7/21/11 11:25	*			6" Sleeve				*	*	*	*
24	DP-4@30ft	7/21/11 11:30	*			6" Sleeve				*	*	*	*
25	DP-5@7.5ft	7/20/11 12:25	*			6" Sleeve				*	*	*	*
26	DP-5@10.5ft	7/20/11 12:35	*			6" Sleeve				*	*	*	*

Notes: EDF OUTPUT REQUIRED

RELINQUISHED BY:	RECEIVED BY:
E. Hightower 7/22/11 07:30 DATE/TIME	[illegible] 7/22/11 8:30 DATE/TIME
[illegible] 7/22/11 10:40 DATE/TIME	[illegible] 7/22/11 1040 DATE/TIME
DATE/TIME	DATE/TIME

CHAIN OF CUSTODY

Curtis & Tompkins, Ltd
Analytical Laboratory Since 1878
2323 Fifth Street
Berkeley, CA 94710
(510)486-0900 Phone
(510)486-0532 Fax

LOGIN # 229640

Sampler: Lizzie Hightower

Project No: 2552

Report To: Joyce Bobek

Project Name:15101 Freedom Ave.,San Leandr **Company :** SOMA Environmental

Turnaround Time: Standard

Telephone: 925-734-6400

Fax: 925-734-6401

Lab No.	Sample ID.	Sampling Date Time	Matrix: Soil	Water	Waste	# of Containers	Preservative: HCL	H_2SO_4	HNO_3	ICE
27	DP-5@12.5ft	7/20/11 12:47	*			6" Sleeve				*
28	DP-5@23ft	7/20/11 13:08	*			6" Sleeve				*
29	DP-5@28ft	7/20/11 13:30	*			6" Sleeve				*
30	DP-5@30ft	7/20/11 13:33	*			6" Sleeve				*
										*
31	DP-1	7/20/11 11:09		*		6 VOAS	*			*
32	DP-2	7/20/11 17:54		*		6 VOAS	*			*
33	DP-3	7/21/11 10:15		*		6 VOAS	*			*
34	DP-4	7/21/11 11:15		*		6 VOAS	*			*
35	DP-5	7/20/11 13:41		*		6 VOAS	*			*

Analyses

TPHg EPA 8015	Gasoline Oxygenates & Lead Scavengers (including TBA, TAME, ETBE, DIPE, 1,2-DCA, EDB), Ethanol	BTEX, MtBE 8260B		TPH-g, BTEX, MtBE 8260B	Gasoline Oxygenates & Lead Scavengers (including TBA, TAME, ETBE, DIPE, 1,2-DCA, EDB), Ethanol							
*	*	*										
*	*	*										
*	*	*										
*	*	*										
				*	*							
				*	*							
				*	*							
				*	*							
				*	*							

Notes: **EDF OUTPUT REQUIRED**

RELINQUISHED BY:

E. Arglett 7/22/11 07:30 DATE/TIME

Ruchi Mathur 7/22/11 10:40 DATE/TIME

DATE/TIME

RECEIVED BY:

Ruchi Mathur 7/22/11 8:30 DATE/TIME

7/22/11 1040 DATE/TIME

DATE/TIME

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 229640 Date Received 7/22/11 Number of coolers 1
Client SOMA Project 15101 Freedom Ave, San Leandro

Date Opened 7/22/11 By (print) [illegible] (sign) [illegible]
Date Logged in ↓ By (print) ↓ (sign) ↓

1. Did cooler come with a shipping slip (airbill, etc) YES **NO**
   Shipping info
2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
   How many Name Date
2B. Were custody seals intact upon arrival? YES NO **N/A**
3. Were custody papers dry and intact when received? **YES** NO
4. Were custody papers filled out properly (ink, signed, etc)? **YES** NO
5. Is the project identifiable from custody papers? (If so fill out top of form) **YES** NO
6. Indicate the packing in cooler: (if other, describe)

   ☐ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None
   ☐ Cloth material ☐ Cardboard ☒ Styrofoam ☐ Paper towels

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

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

   ☒ Samples Received on ice & cold without a temperature blank

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

8. Were Method 5035 sampling containers present? YES **NO**
   If YES, what time were they transferred to freezer?
9. Did all bottles arrive unbroken/unopened? **YES** NO
10. Are samples in the appropriate containers for indicated tests? **YES** NO
11. Are sample labels present, in good condition and complete? **YES** NO
12. Do the sample labels agree with custody papers? **YES** NO
13. Was sufficient amount of sample sent for tests requested? **YES** NO
14. Are the samples appropriately preserved? **YES** NO N/A
15. Did you check preservatives for all bottles for each sample? YES NO **N/A**
16. Did you document your preservative check? YES NO **N/A**
17. Did you change the hold time in LIMS for unpreserved VOAs? YES **NO** ~~N/A~~ vo
18. Are bubbles > 6mm absent in VOA samples? **YES** NO N/A
19. Was the client contacted concerning this sample delivery? YES **NO**
   If YES, Who was called? By Date:

COMMENTS

Rev 8, 6/11

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8015B
Matrix:	Soil	Basis:	as received
Units:	mg/Kg	Received:	07/22/11

Field ID:	DP-1@6.5FT	Batch#:	177180
Type:	SAMPLE	Sampled:	07/20/11
Lab ID:	229640-001	Analyzed:	07/26/11
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	1.1

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	74	74-132

Field ID:	DP-1@16FT	Batch#:	177180
Type:	SAMPLE	Sampled:	07/20/11
Lab ID:	229640-002	Analyzed:	07/26/11
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	0.91

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	78	74-132

Field ID:	DP-1@20FT	Batch#:	177180
Type:	SAMPLE	Sampled:	07/20/11
Lab ID:	229640-003	Analyzed:	07/26/11
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	22	1.1

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	89	74-132

Field ID:	DP-1@22FT	Batch#:	177180
Type:	SAMPLE	Sampled:	07/20/11
Lab ID:	229640-004	Analyzed:	07/26/11
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	5.7	0.94

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	88	74-132

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8015B
Matrix:	Soil	Basis:	as received
Units:	mg/Kg	Received:	07/22/11

Field ID:	DP-1@23FT	Batch#:	177180
Type:	SAMPLE	Sampled:	07/20/11
Lab ID:	229640-005	Analyzed:	07/26/11
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	1.0

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	83	74-132

Field ID:	DP-1@30FT	Batch#:	177180
Type:	SAMPLE	Sampled:	07/20/11
Lab ID:	229640-006	Analyzed:	07/26/11
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	1.3	1.0

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	85	74-132

Field ID:	DP-2@8FT	Batch#:	177180
Type:	SAMPLE	Sampled:	07/20/11
Lab ID:	229640-007	Analyzed:	07/26/11
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	0.92

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	83	74-132

Field ID:	DP-2@10FT	Batch#:	177180
Type:	SAMPLE	Sampled:	07/20/11
Lab ID:	229640-008	Analyzed:	07/26/11
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	1.1

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	83	74-132

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8015B
Matrix:	Soil	Basis:	as received
Units:	mg/Kg	Received:	07/22/11

Field ID:	DP-2@20FT	Batch#:	177180
Type:	SAMPLE	Sampled:	07/20/11
Lab ID:	229640-009	Analyzed:	07/27/11
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	0.94

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	81	74-132

Field ID:	DP-2@24FT	Batch#:	177180
Type:	SAMPLE	Sampled:	07/20/11
Lab ID:	229640-010	Analyzed:	07/27/11
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	4.4 Y	0.99

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	89	74-132

Field ID:	DP-2@28FT	Batch#:	177180
Type:	SAMPLE	Sampled:	07/20/11
Lab ID:	229640-011	Analyzed:	07/27/11
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	1.0

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	85	74-132

Field ID:	DP-2@30FT	Batch#:	177180
Type:	SAMPLE	Sampled:	07/20/11
Lab ID:	229640-012	Analyzed:	07/27/11
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	0.92

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	85	74-132

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8015B
Matrix:	Soil	Basis:	as received
Units:	mg/Kg	Received:	07/22/11

Field ID:	DP-3@6FT	Batch#:	177180
Type:	SAMPLE	Sampled:	07/21/11
Lab ID:	229640-013	Analyzed:	07/27/11
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	1.0

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	83	74-132

Field ID:	DP-3@12FT	Batch#:	177180
Type:	SAMPLE	Sampled:	07/21/11
Lab ID:	229640-014	Analyzed:	07/27/11
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	1.1

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	83	74-132

Field ID:	DP-3@20FT	Batch#:	177180
Type:	SAMPLE	Sampled:	07/21/11
Lab ID:	229640-015	Analyzed:	07/27/11
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	26 Y	1.0

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	103	74-132

Field ID:	DP-3@21FT	Batch#:	177180
Type:	SAMPLE	Sampled:	07/21/11
Lab ID:	229640-016	Analyzed:	07/27/11
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	0.98

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	86	74-132

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8015B
Matrix:	Soil	Basis:	as received
Units:	mg/Kg	Received:	07/22/11

Field ID:	DP-3@30FT	Batch#:	177180
Type:	SAMPLE	Sampled:	07/21/11
Lab ID:	229640-017	Analyzed:	07/27/11
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	1.1

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	80	74-132

Field ID:	DP-4@8FT	Batch#:	177180
Type:	SAMPLE	Sampled:	07/21/11
Lab ID:	229640-018	Analyzed:	07/27/11
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	1.1

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	77	74-132

Field ID:	DP-4@11FT	Batch#:	177180
Type:	SAMPLE	Sampled:	07/21/11
Lab ID:	229640-019	Analyzed:	07/27/11
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	0.99

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	77	74-132

Field ID:	DP-4@16FT	Batch#:	177180
Type:	SAMPLE	Sampled:	07/21/11
Lab ID:	229640-020	Analyzed:	07/27/11
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	1.0

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	79	74-132

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8015B
Matrix:	Soil	Basis:	as received
Units:	mg/Kg	Received:	07/22/11

Field ID:	DP-4@20FT	Batch#:	177206
Type:	SAMPLE	Sampled:	07/21/11
Lab ID:	229640-021	Analyzed:	07/28/11
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	5.2 Y	1.1

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	100	74-132

Field ID:	DP-4@24FT	Batch#:	177261
Type:	SAMPLE	Sampled:	07/21/11
Lab ID:	229640-022	Analyzed:	07/28/11
Diln Fac:	10.00		

Analyte	Result	RL
Gasoline C7-C12	140	10

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	90	74-132

Field ID:	DP-4@26FT	Batch#:	177206
Type:	SAMPLE	Sampled:	07/21/11
Lab ID:	229640-023	Analyzed:	07/28/11
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	40	1.0

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	103	74-132

Field ID:	DP-4@30FT	Batch#:	177206
Type:	SAMPLE	Sampled:	07/21/11
Lab ID:	229640-024	Analyzed:	07/28/11
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	1.0

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	90	74-132

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8015B
Matrix:	Soil	Basis:	as received
Units:	mg/Kg	Received:	07/22/11

Field ID:	DP-5@7.5FT	Batch#:	177206
Type:	SAMPLE	Sampled:	07/20/11
Lab ID:	229640-025	Analyzed:	07/28/11
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	1.1

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	92	74-132

Field ID:	DP-5@10.5FT	Batch#:	177206
Type:	SAMPLE	Sampled:	07/20/11
Lab ID:	229640-026	Analyzed:	07/28/11
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	1.0

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	89	74-132

Field ID:	DP-5@12.5FT	Batch#:	177206
Type:	SAMPLE	Sampled:	07/20/11
Lab ID:	229640-027	Analyzed:	07/28/11
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	0.93

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	87	74-132

Field ID:	DP-5@23FT	Batch#:	177261
Type:	SAMPLE	Sampled:	07/20/11
Lab ID:	229640-028	Analyzed:	07/28/11
Diln Fac:	10.00		

Analyte	Result	RL
Gasoline C7-C12	67	10

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	87	74-132

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8015B
Matrix:	Soil	Basis:	as received
Units:	mg/Kg	Received:	07/22/11

Field ID:	DP-5@28FT	Batch#:	177206
Type:	SAMPLE	Sampled:	07/20/11
Lab ID:	229640-029	Analyzed:	07/28/11
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	0.96

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	89	74-132

Field ID:	DP-5@30FT	Batch#:	177206
Type:	SAMPLE	Sampled:	07/20/11
Lab ID:	229640-030	Analyzed:	07/27/11
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	0.96

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	92	74-132

Type:	BLANK	Batch#:	177180
Lab ID:	QC601700	Analyzed:	07/26/11
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	1.0

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	76	74-132

Type:	BLANK	Batch#:	177206
Lab ID:	QC601820	Analyzed:	07/27/11
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	0.20

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	86	74-132

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8015B
Matrix:	Soil	Basis:	as received
Units:	mg/Kg	Received:	07/22/11

Type:	BLANK	Batch#:	177261
Lab ID:	QC602024	Analyzed:	07/28/11
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	0.20

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	75	74-132

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC601699	Batch#:	177180
Matrix:	Soil	Analyzed:	07/26/11
Units:	mg/Kg		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1.000	0.9147	91	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	82	74-132

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8015B
Field ID:	DP-1@6.5FT	Diln Fac:	1.000
MSS Lab ID:	229640-001	Batch#:	177180
Matrix:	Soil	Sampled:	07/20/11
Units:	mg/Kg	Received:	07/22/11
Basis:	as received	Analyzed:	07/27/11

Type: MS Lab ID: QC601701

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	0.1023	10.00	8.796	87	43-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	90	74-132

Type: MSD Lab ID: QC601702

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	10.00	8.628	85	43-120	2	34

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	91	74-132

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC601819	Batch#:	177206
Matrix:	Soil	Analyzed:	07/27/11
Units:	mg/Kg		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1.000	0.9388	94	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	91	74-132

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8015B
Field ID:	DP-5@30FT	Diln Fac:	1.000
MSS Lab ID:	229640-030	Batch#:	177206
Matrix:	Soil	Sampled:	07/20/11
Units:	mg/Kg	Received:	07/22/11
Basis:	as received	Analyzed:	07/27/11

Type: MS Lab ID: QC601854

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	0.1321	10.42	9.468	90	43-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	102	74-132

Type: MSD Lab ID: QC601855

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	10.75	9.758	90	43-120	0	34

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	97	74-132

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8015B
Matrix:	Soil	Batch#:	177261
Units:	mg/Kg	Analyzed:	07/28/11
Diln Fac:	1.000		

Type: BS Lab ID: QC602022

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1.000	0.9030	90	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	82	74-132

Type: BSD Lab ID: QC602023

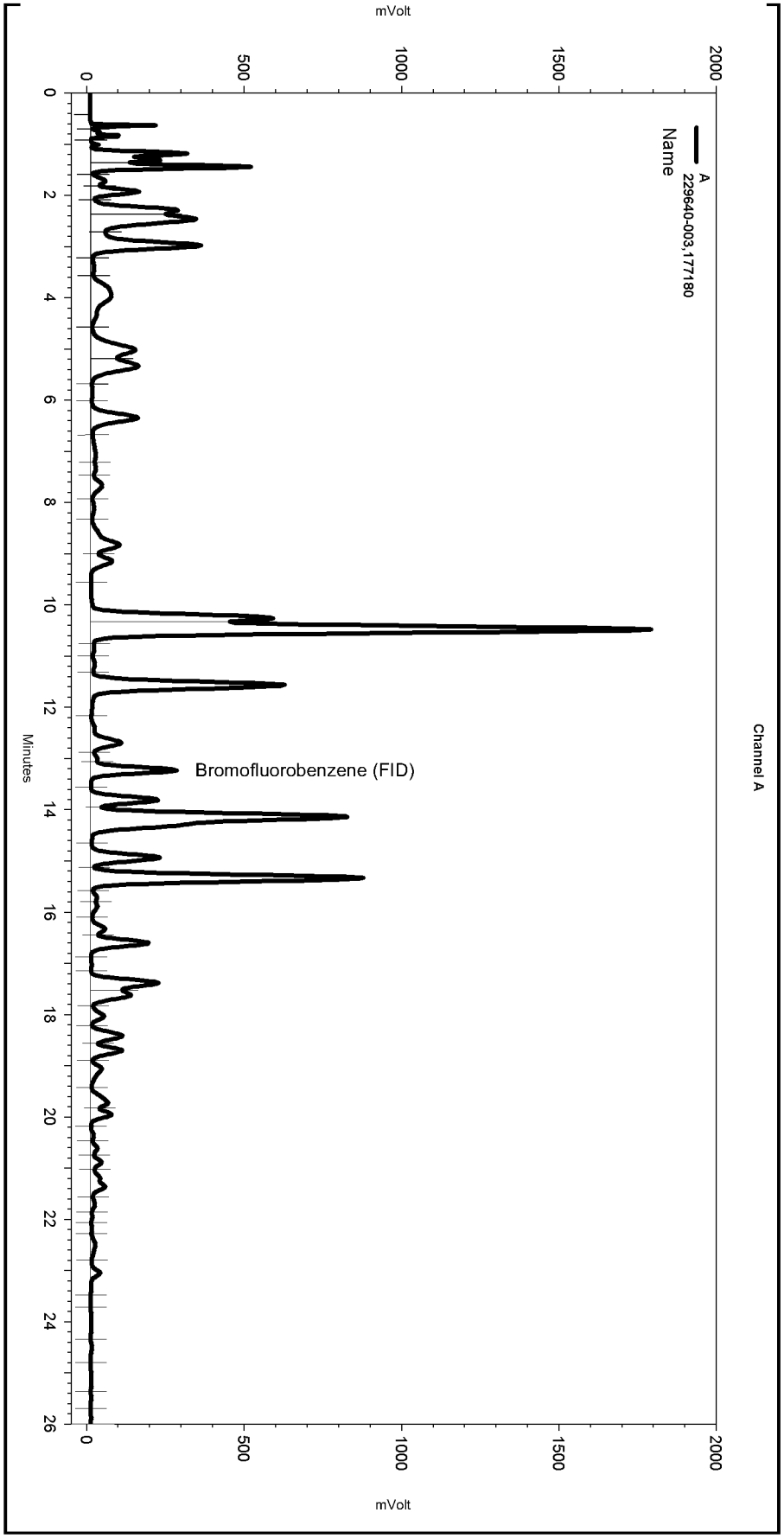
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	5.000	4.594	92	80-120	2	21

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	85	74-132

RPD= Relative Percent Difference

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC05\Sequence\207.seq**
Sample Name: **229640-003,177180**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC05\Data\207-008**
Instrument: GC05 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC05\Method\tvhbtxe111.met

Software Version 3.1.7
Run Date: 7/26/2011 7:55:29 PM
Analysis Date: 7/27/2011 11:17:50 AM
Sample Amount: 0.91 Multiplier: 0.91
Vial & pH or Core ID: a



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
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Yes	Threshold	0	0	50

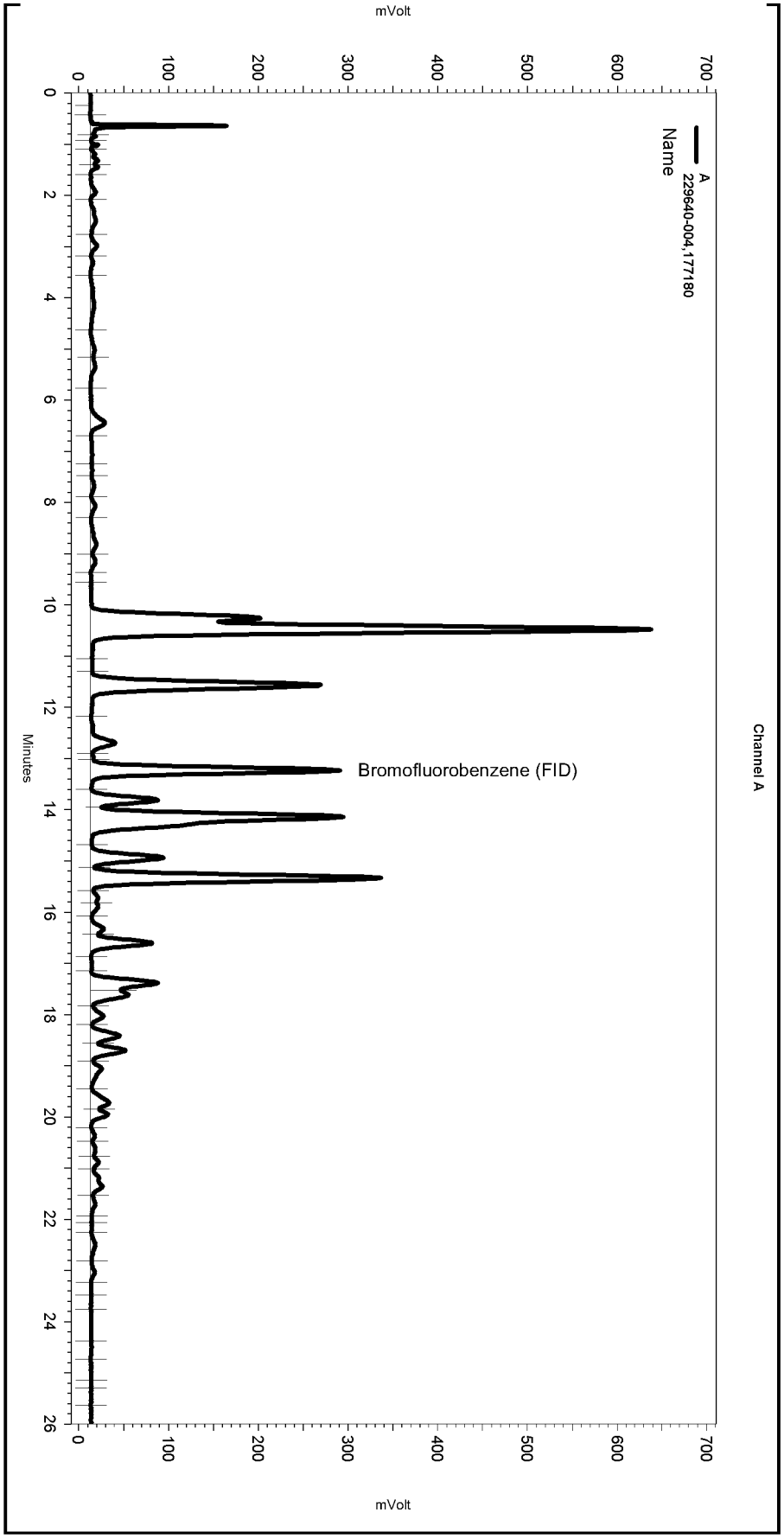
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC05\Data\207-008

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Lowest Point Horizontal Baseli	0	26.017	0
Yes	Split Peak	13.064	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC05\Sequence\207.seq**
Sample Name: **229640-004,177180**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC05\Data\207-010**
Instrument: GC05 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC05\Method\tvhbtxe111.met

Software Version 3.1.7
Run Date: 7/26/2011 9:08:41 PM
Analysis Date: 7/27/2011 11:19:02 AM
Sample Amount: 1.06 Multiplier: 1.06
Vial & pH or Core ID: a



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

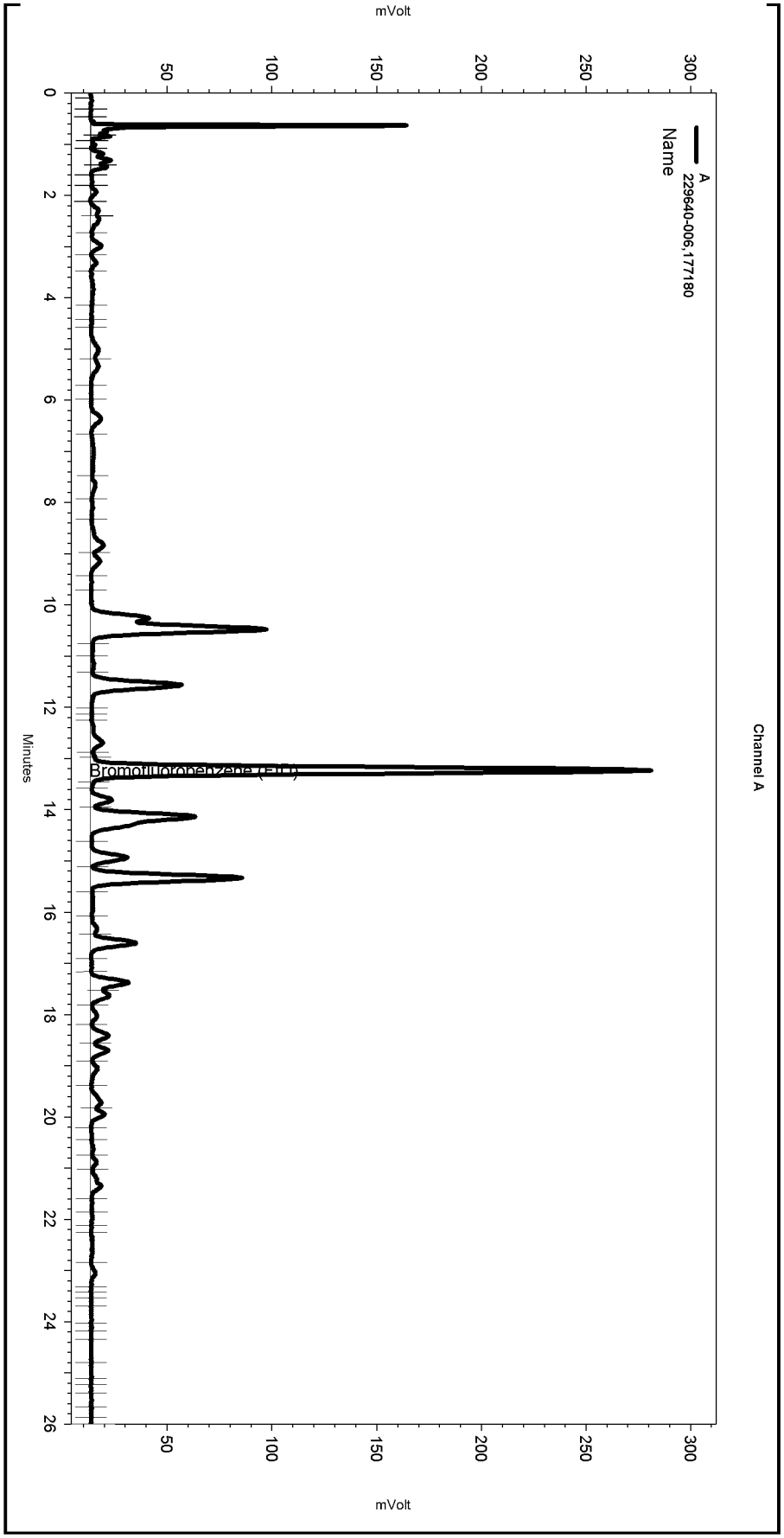
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC05\Data\207-010

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Lowest Point Horizontal Baseli	0	26.017	0
Yes	Split Peak	13.014	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC05\Sequence\207.seq**
Sample Name: **229640-006,177180**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC05\Data\207-012**
Instrument: GC05 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC05\Method\tvhbtxe111.met

Software Version 3.1.7
Run Date: 7/26/2011 10:21:55 PM
Analysis Date: 7/27/2011 11:20:06 AM
Sample Amount: 0.96 Multiplier: 0.96
Vial & pH or Core ID: a



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

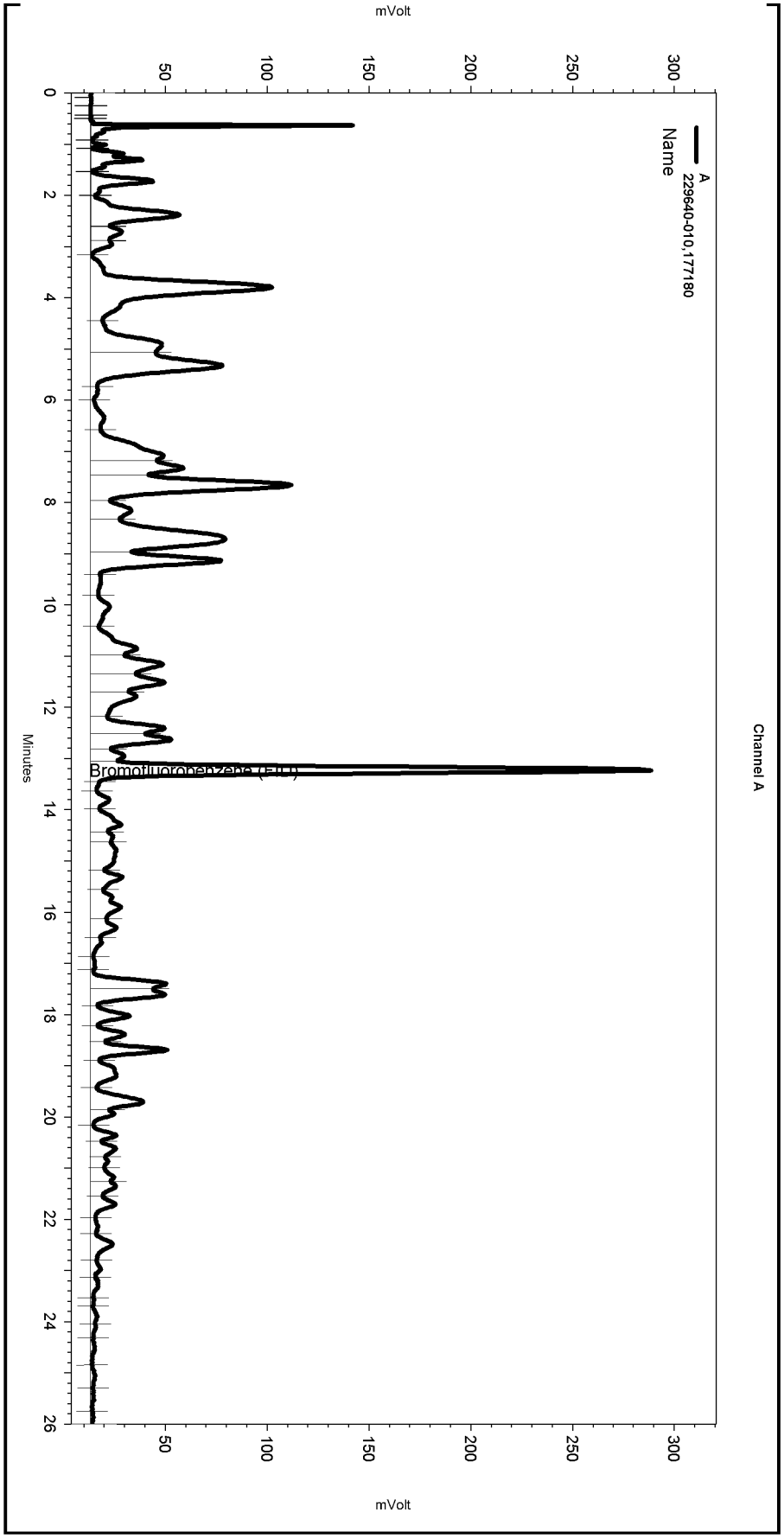
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC05\Data\207-012

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Lowest Point Horizontal Baseli	0	26.017	0
Yes	Split Peak	12.986	0	0
Yes	Split Peak	13.466	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC05\Sequence\207.seq**
Sample Name: **229640-010,177180**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC05\Data\207-016**
Instrument: GC05 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC05\Method\tvhbtxe111.met

Software Version 3.1.7
Run Date: 7/27/2011 12:48:13 AM
Analysis Date: 7/27/2011 11:21:29 AM
Sample Amount: 1.01 Multiplier: 1.01
Vial & pH or Core ID: a



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

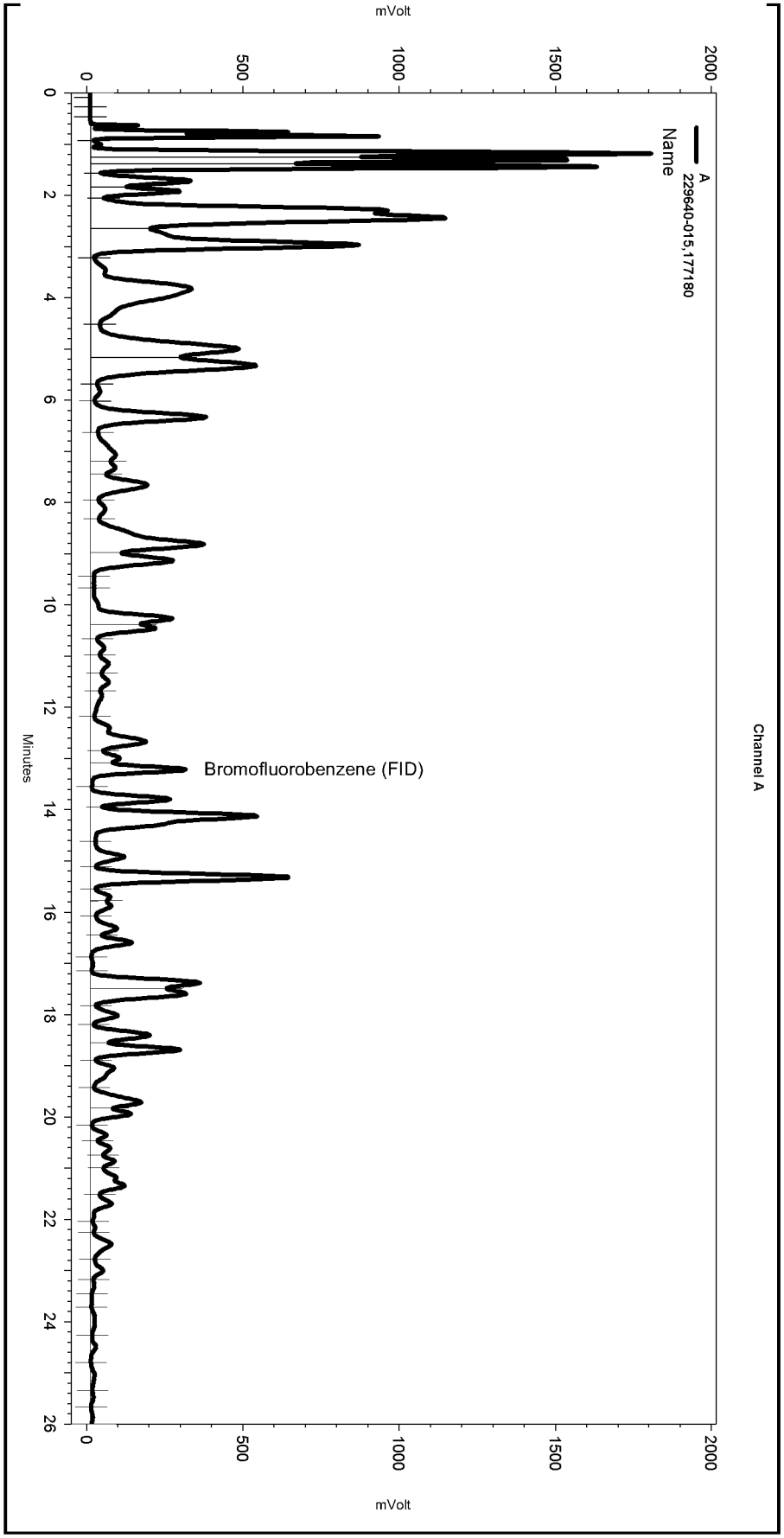
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC05\Data\207-016

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Lowest Point Horizontal Baseli	0	26.017	0
Yes	Split Peak	13.451	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC05\Sequence\207.seq**
Sample Name: **229640-015,177180**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC05\Data\207-023**
Instrument: GC05 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC05\Method\tvhbtxe111.met

Software Version 3.1.7
Run Date: 7/27/2011 5:04:19 AM
Analysis Date: 7/27/2011 11:23:26 AM
Sample Amount: 0.96 Multiplier: 0.96
Vial & pH or Core ID: a



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

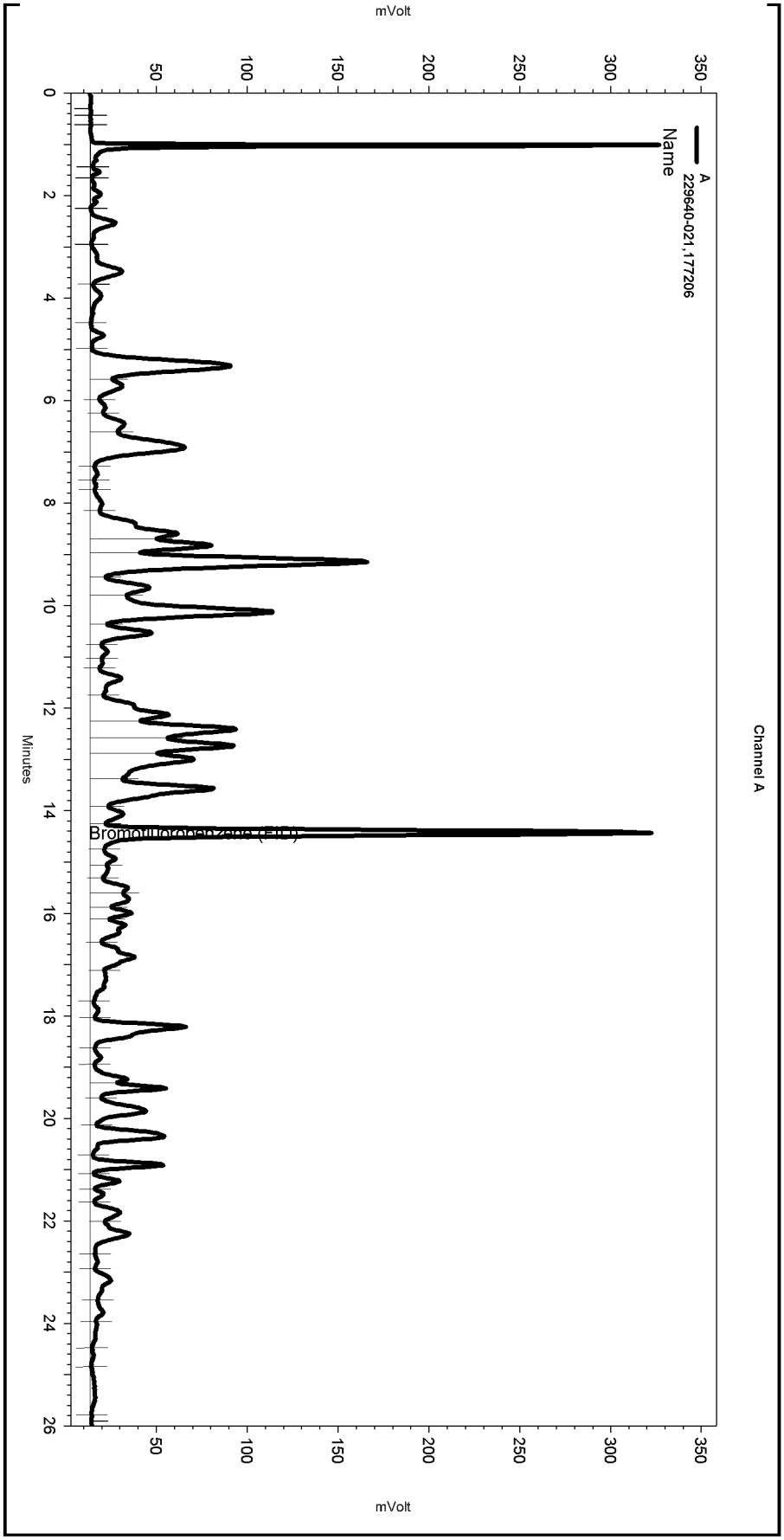
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC05\Data\207-023

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Lowest Point Horizontal Baseli	0	26.017	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC04\Sequence\208.seq**
Sample Name: **229640-021,177206**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC04\Data\208-022**
Instrument: GC04 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC04\Method\tvhbtxe166.met

Software Version 3.1.7
Run Date: 7/28/2011 1:14:47 AM
Analysis Date: 7/28/2011 11:55:23 AM
Sample Amount: 0.91 Multiplier: 0.91
Vial & pH or Core ID: a



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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

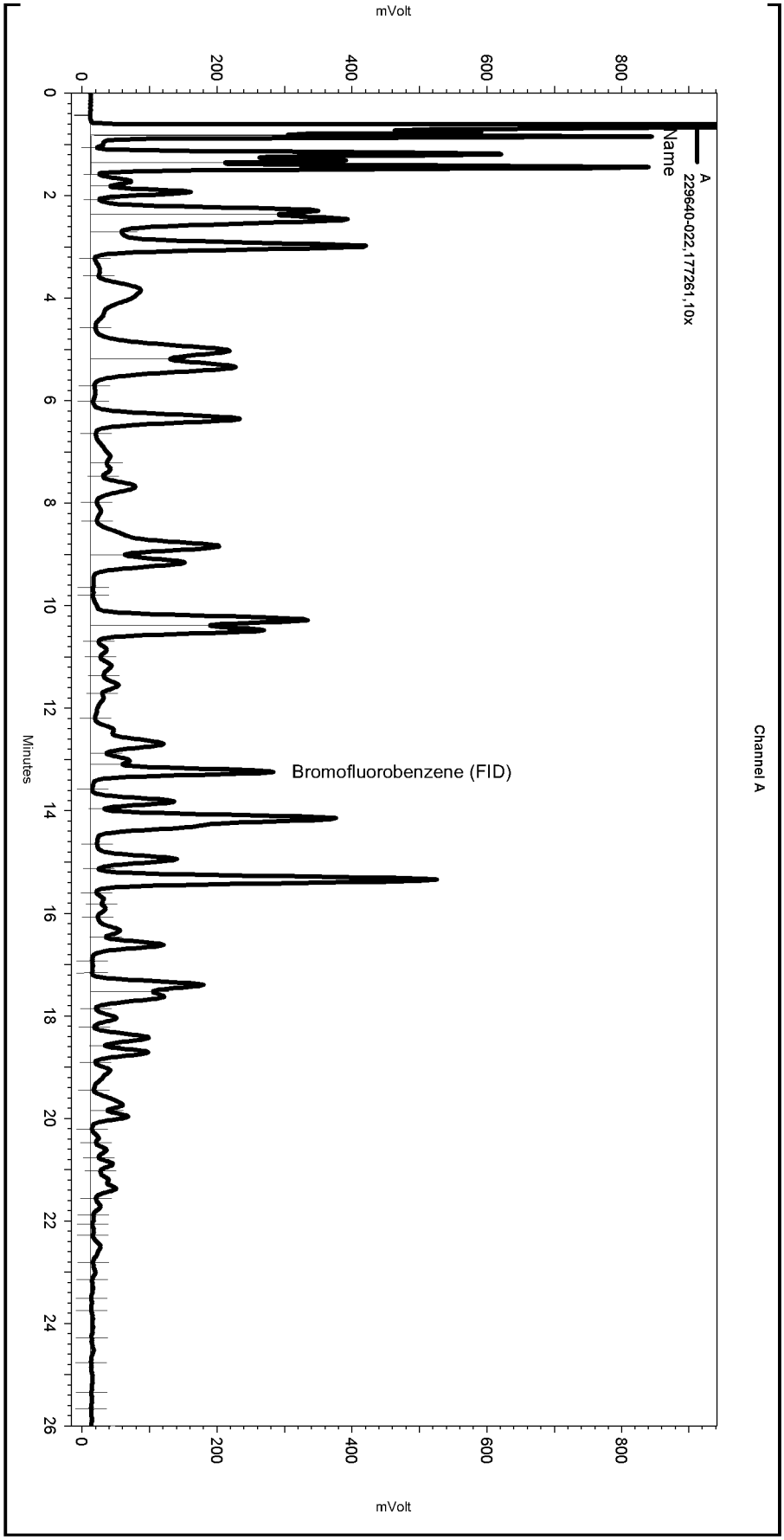
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC04\Data\208-022

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Lowest Point Horizontal Baseli	0	26.017	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC05\Sequence\209.seq**
Sample Name: **229640-022,177261,10x**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC05\Data\209-009**
Instrument: GC05 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC05\Method\tvhbtxe111.met

Software Version 3.1.7
Run Date: 7/28/2011 8:21:15 PM
Analysis Date: 7/29/2011 11:18:05 AM
Sample Amount: 1 Multiplier: 1
Vial & pH or Core ID: a,dd471



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Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

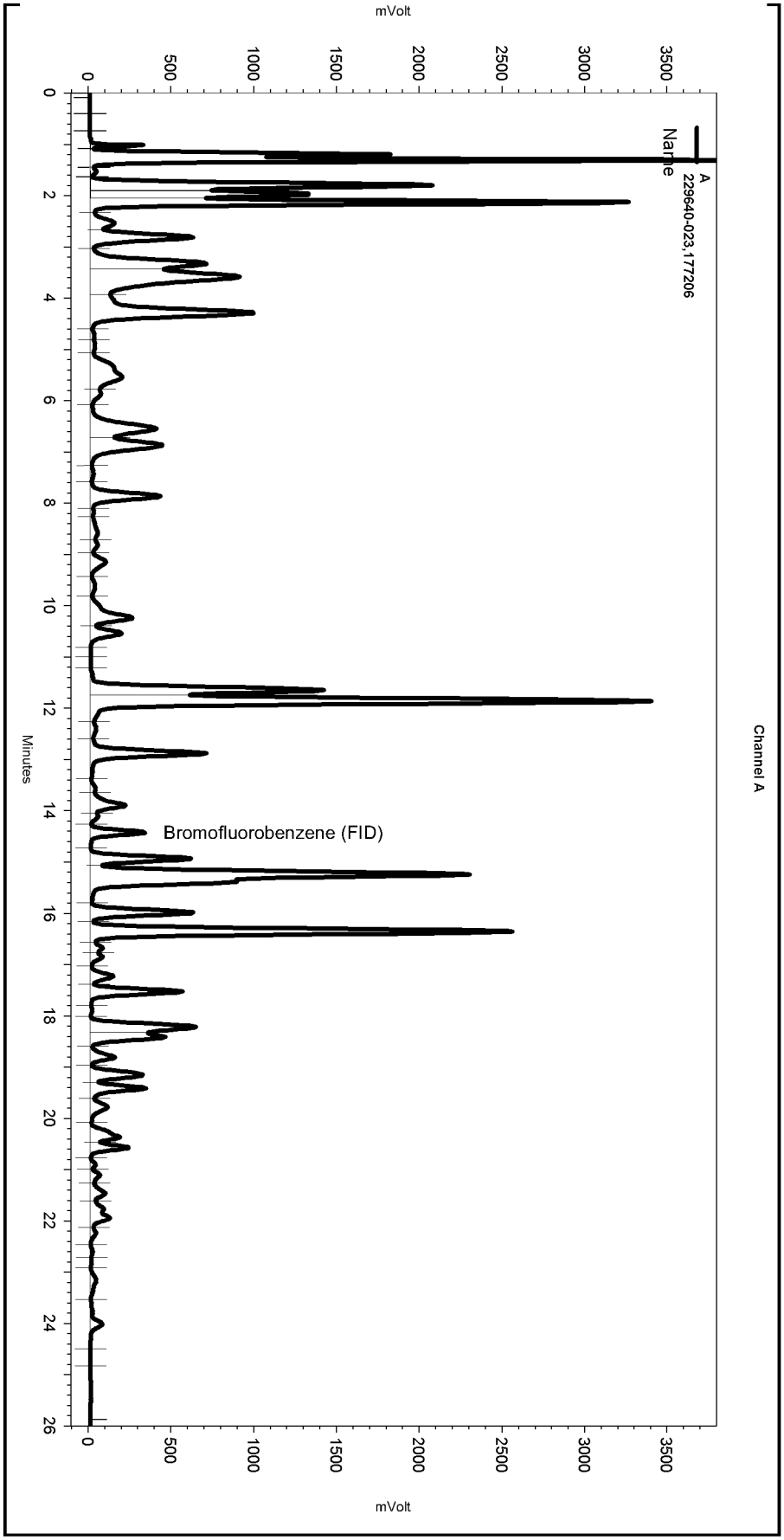
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC05\Data\209-009

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Lowest Point Horizontal Baseli	0	26.017	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC04\Sequence\208.seq**
Sample Name: **229640-023,177206**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC04\Data\208-024**
Instrument: GC04 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC04\Method\tvhbtxe166.met

Software Version 3.1.7
Run Date: 7/28/2011 2:29:59 AM
Analysis Date: 7/28/2011 11:57:38 AM
Sample Amount: 0.97 Multiplier: 0.97
Vial & pH or Core ID: a



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

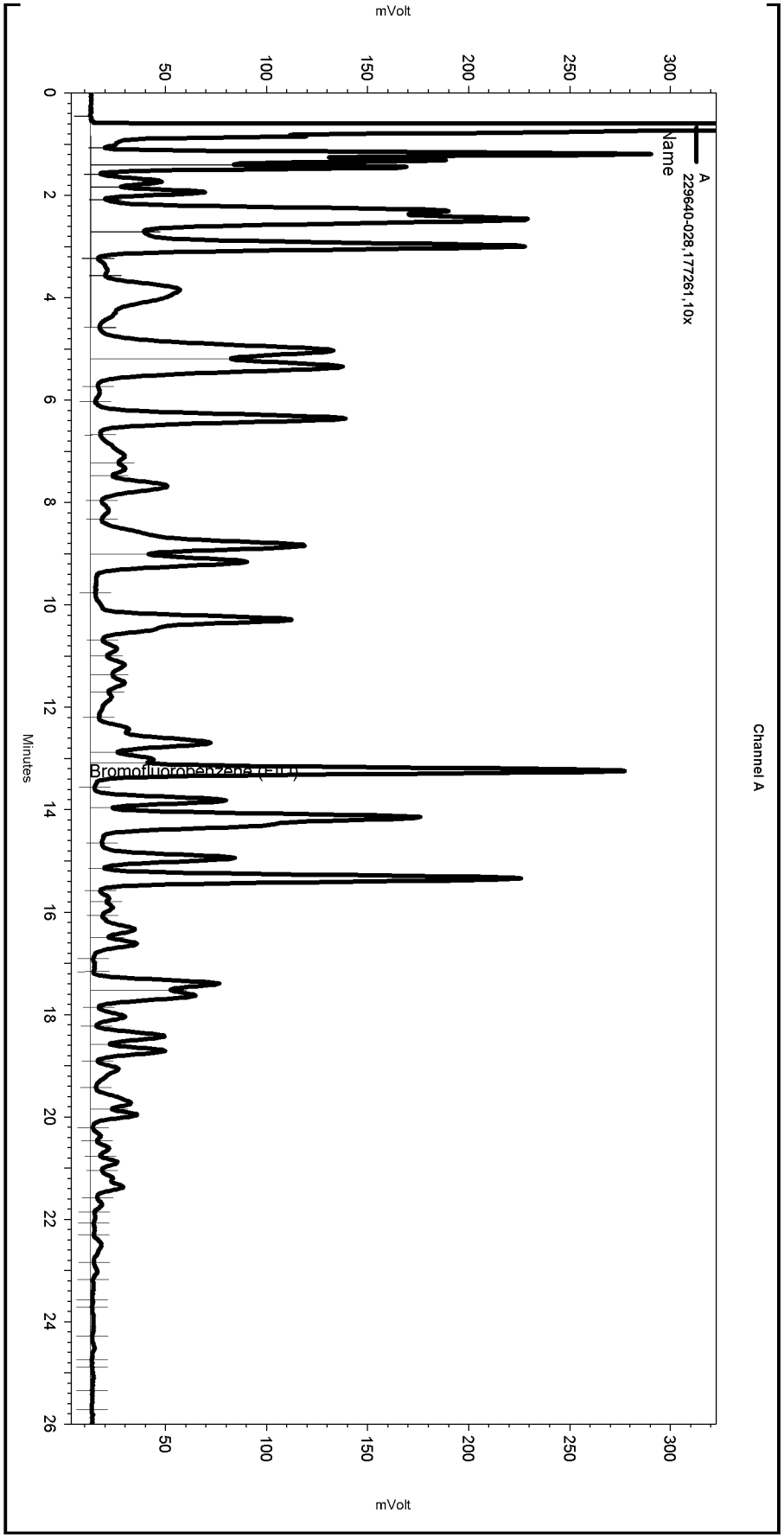
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC04\Data\208-024

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Lowest Point Horizontal Baseli	0	26.017	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC05\Sequence\209.seq**
Sample Name: **229640-028,177261,10x**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC05\Data\209-010**
Instrument: GC05 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC05\Method\tvhbtxe111.met

Software Version 3.1.7
Run Date: 7/28/2011 8:57:54 PM
Analysis Date: 7/29/2011 11:19:27 AM
Sample Amount: 1 Multiplier: 1
Vial & pH or Core ID: a,dd471



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No items selected for this section

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No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

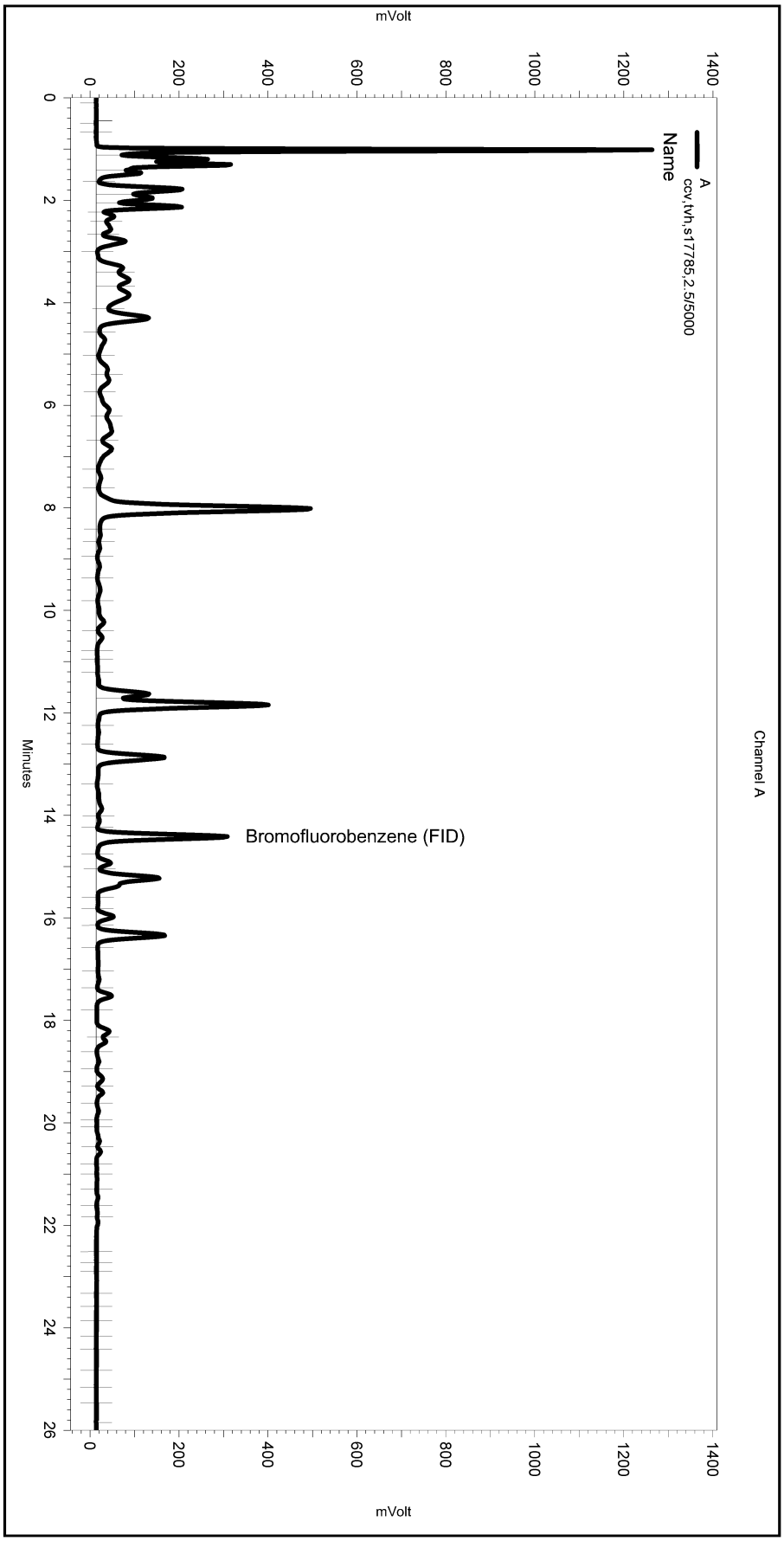
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC05\Data\209-010

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Lowest Point Horizontal Baseli	0	26.017	0
Yes	Split Peak	13.082	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC04\Sequence\208.seq**
Sample Name: **ccv,tvh,s17785,2.5/5000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC04\Data\208-002**
Instrument: GC04 Vial: N/A Operator: lims2k3\tvh3
Method Name: \\Lims\gdrive\ezchrom\Projects\GC04\Method\tvhbtxe166.met

Software Version 3.1.7
Run Date: 7/27/2011 11:21:17 AM
Analysis Date: 7/27/2011 11:50:46 AM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: {Data Description}



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

Manual Integration Fixes

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10047\208-002_7D48.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	DP-1	Units:	ug/L
Lab ID:	229640-031	Sampled:	07/20/11
Matrix:	Water	Received:	07/22/11

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Gasoline C7-C12	84,000	1,700	33.33	177234	07/28/11
tert-Butyl Alcohol (TBA)	ND	330	33.33	177234	07/28/11
Isopropyl Ether (DIPE)	ND	17	33.33	177234	07/28/11
Ethyl tert-Butyl Ether (ETBE)	ND	17	33.33	177234	07/28/11
Methyl tert-Amyl Ether (TAME)	ND	17	33.33	177234	07/28/11
Ethanol	ND	33,000	33.33	177234	07/28/11
MTBE	ND	17	33.33	177234	07/28/11
1,2-Dichloroethane	ND	17	33.33	177234	07/28/11
Benzene	ND	17	33.33	177234	07/28/11
Toluene	250	17	33.33	177234	07/28/11
1,2-Dibromoethane	ND	17	33.33	177234	07/28/11
Ethylbenzene	3,600	42	83.33	177278	07/30/11
m,p-Xylenes	11,000	42	83.33	177278	07/30/11
o-Xylene	4,300	42	83.33	177278	07/30/11

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	94	80-127	33.33	177234	07/28/11
1,2-Dichloroethane-d4	110	73-145	33.33	177234	07/28/11
Toluene-d8	98	80-120	33.33	177234	07/28/11
Bromofluorobenzene	103	80-120	33.33	177234	07/28/11

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	DP-2	Units:	ug/L
Lab ID:	229640-032	Sampled:	07/20/11
Matrix:	Water	Received:	07/22/11

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Gasoline C7-C12	46,000	1,700	33.33	177234	07/28/11
tert-Butyl Alcohol (TBA)	ND	100	10.00	177194	07/27/11
Isopropyl Ether (DIPE)	ND	5.0	10.00	177194	07/27/11
Ethyl tert-Butyl Ether (ETBE)	ND	5.0	10.00	177194	07/27/11
Methyl tert-Amyl Ether (TAME)	ND	5.0	10.00	177194	07/27/11
Ethanol	ND	10,000	10.00	177194	07/27/11
MTBE	ND	5.0	10.00	177194	07/27/11
1,2-Dichloroethane	ND	5.0	10.00	177194	07/27/11
Benzene	ND	5.0	10.00	177194	07/27/11
Toluene	ND	5.0	10.00	177194	07/27/11
1,2-Dibromoethane	ND	5.0	10.00	177194	07/27/11
Ethylbenzene	540	5.0	10.00	177194	07/27/11
m,p-Xylenes	880	5.0	10.00	177194	07/27/11
o-Xylene	250	5.0	10.00	177194	07/27/11

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	90	80-127	10.00	177194	07/27/11
1,2-Dichloroethane-d4	105	73-145	10.00	177194	07/27/11
Toluene-d8	100	80-120	10.00	177194	07/27/11
Bromofluorobenzene	100	80-120	10.00	177194	07/27/11

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	DP-3	Batch#:	177234
Lab ID:	229640-033	Sampled:	07/21/11
Matrix:	Water	Received:	07/22/11
Units:	ug/L	Analyzed:	07/28/11
Diln Fac:	2.000		

Analyte	Result	RL
Gasoline C7-C12	1,500	100
tert-Butyl Alcohol (TBA)	40	20
Isopropyl Ether (DIPE)	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	1.0
Methyl tert-Amyl Ether (TAME)	8.9	1.0
Ethanol	ND	2,000
MTBE	150	1.0
1,2-Dichloroethane	ND	1.0
Benzene	ND	1.0
Toluene	ND	1.0
1,2-Dibromoethane	ND	1.0
Ethylbenzene	42	1.0
m,p-Xylenes	120	1.0
o-Xylene	ND	1.0

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-127
1,2-Dichloroethane-d4	115	73-145
Toluene-d8	96	80-120
Bromofluorobenzene	103	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	DP-4	Units:	ug/L
Lab ID:	229640-034	Sampled:	07/21/11
Matrix:	Water	Received:	07/22/11

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Gasoline C7-C12	20,000	1,000	20.00	177278	07/29/11
tert-Butyl Alcohol (TBA)	ND	10	1.000	177194	07/27/11
Isopropyl Ether (DIPE)	ND	0.50	1.000	177194	07/27/11
Ethyl tert-Butyl Ether (ETBE)	ND	0.50	1.000	177194	07/27/11
Methyl tert-Amyl Ether (TAME)	ND	0.50	1.000	177194	07/27/11
Ethanol	ND	1,000	1.000	177194	07/27/11
MTBE	ND	0.50	1.000	177194	07/27/11
1,2-Dichloroethane	0.65	0.50	1.000	177194	07/27/11
Benzene	1.1	0.50	1.000	177194	07/27/11
Toluene	0.98	0.50	1.000	177194	07/27/11
1,2-Dibromoethane	ND	0.50	1.000	177194	07/27/11
Ethylbenzene	1,100	10	20.00	177278	07/29/11
m,p-Xylenes	1,500	10	20.00	177278	07/29/11
o-Xylene	170	10	20.00	177278	07/29/11

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	98	80-127	1.000	177194	07/27/11
1,2-Dichloroethane-d4	126	73-145	1.000	177194	07/27/11
Toluene-d8	97	80-120	1.000	177194	07/27/11
Bromofluorobenzene	103	80-120	1.000	177194	07/27/11

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Gasoline by GC/MS

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	DP-5	Units:	ug/L
Lab ID:	229640-035	Sampled:	07/20/11
Matrix:	Water	Received:	07/22/11

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Gasoline C7-C12	80,000	8,300	166.7	177278	07/30/11
tert-Butyl Alcohol (TBA)	ND	500	50.00	177234	07/28/11
Isopropyl Ether (DIPE)	ND	25	50.00	177234	07/28/11
Ethyl tert-Butyl Ether (ETBE)	ND	25	50.00	177234	07/28/11
Methyl tert-Amyl Ether (TAME)	ND	25	50.00	177234	07/28/11
Ethanol	ND	50,000	50.00	177234	07/28/11
MTBE	ND	25	50.00	177234	07/28/11
1,2-Dichloroethane	ND	25	50.00	177234	07/28/11
Benzene	290	25	50.00	177234	07/28/11
Toluene	140	25	50.00	177234	07/28/11
1,2-Dibromoethane	ND	25	50.00	177234	07/28/11
Ethylbenzene	4,300	83	166.7	177278	07/30/11
m,p-Xylenes	12,000	83	166.7	177278	07/30/11
o-Xylene	4,800	83	166.7	177278	07/30/11

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	93	80-127	50.00	177234	07/28/11
1,2-Dichloroethane-d4	109	73-145	50.00	177234	07/28/11
Toluene-d8	101	80-120	50.00	177234	07/28/11
Bromofluorobenzene	101	80-120	50.00	177234	07/28/11

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	177194
Units:	ug/L	Analyzed:	07/27/11
Diln Fac:	1.000		

Type: BS Lab ID: QC601773

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	62.50	70.92	113	46-141
Isopropyl Ether (DIPE)	12.50	9.377	75	52-139
Ethyl tert-Butyl Ether (ETBE)	12.50	10.13	81	56-131
Methyl tert-Amyl Ether (TAME)	12.50	9.890	79	65-120
MTBE	12.50	11.34	91	59-123
1,2-Dichloroethane	12.50	14.84	119	71-135
Benzene	12.50	12.52	100	80-122
Toluene	12.50	11.96	96	80-120
1,2-Dibromoethane	12.50	12.68	101	79-120
Ethylbenzene	12.50	13.44	107	80-120
m,p-Xylenes	25.00	24.94	100	80-120
o-Xylene	12.50	12.27	98	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-127
1,2-Dichloroethane-d4	124	73-145
Toluene-d8	99	80-120
Bromofluorobenzene	108	80-120

Type: BSD Lab ID: QC601774

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	62.50	76.45	122	46-141	8	31
Isopropyl Ether (DIPE)	12.50	10.92	87	52-139	15	20
Ethyl tert-Butyl Ether (ETBE)	12.50	11.23	90	56-131	10	20
Methyl tert-Amyl Ether (TAME)	12.50	10.34	83	65-120	4	20
MTBE	12.50	11.87	95	59-123	5	20
1,2-Dichloroethane	12.50	15.05	120	71-135	1	20
Benzene	12.50	12.16	97	80-122	3	20
Toluene	12.50	12.10	97	80-120	1	20
1,2-Dibromoethane	12.50	13.23	106	79-120	4	20
Ethylbenzene	12.50	12.93	103	80-120	4	20
m,p-Xylenes	25.00	25.68	103	80-120	3	20
o-Xylene	12.50	12.12	97	80-120	1	20

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-127
1,2-Dichloroethane-d4	121	73-145
Toluene-d8	97	80-120
Bromofluorobenzene	98	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	177194
Units:	ug/L	Analyzed:	07/27/11
Diln Fac:	1.000		

Type: BS Lab ID: QC601775

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	979.4	98	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-127
1,2-Dichloroethane-d4	118	73-145
Toluene-d8	99	80-120
Bromofluorobenzene	100	80-120

Type: BSD Lab ID: QC601776

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,000	1,054	105	80-120	7	20

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-127
1,2-Dichloroethane-d4	120	73-145
Toluene-d8	100	80-120
Bromofluorobenzene	101	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC601777	Batch#:	177194
Matrix:	Water	Analyzed:	07/27/11
Units:	ug/L		

Analyte	Result	RL
Gasoline C7-C12	ND	50
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
Ethanol	ND	1,000
MTBE	ND	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-127
1,2-Dichloroethane-d4	121	73-145
Toluene-d8	100	80-120
Bromofluorobenzene	101	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	177234
Units:	ug/L	Analyzed:	07/28/11
Diln Fac:	1.000		

Type: BS Lab ID: QC601930

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	62.50	61.64	99	46-141
Isopropyl Ether (DIPE)	12.50	9.417	75	52-139
Ethyl tert-Butyl Ether (ETBE)	12.50	10.08	81	56-131
Methyl tert-Amyl Ether (TAME)	12.50	9.885	79	65-120
MTBE	12.50	11.27	90	59-123
1,2-Dichloroethane	12.50	12.80	102	71-135
Benzene	12.50	12.25	98	80-122
Toluene	12.50	12.24	98	80-120
1,2-Dibromoethane	12.50	12.41	99	79-120
Ethylbenzene	12.50	13.30	106	80-120
m,p-Xylenes	25.00	26.03	104	80-120
o-Xylene	12.50	12.66	101	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	91	80-127
1,2-Dichloroethane-d4	111	73-145
Toluene-d8	99	80-120
Bromofluorobenzene	100	80-120

Type: BSD Lab ID: QC601931

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	62.50	78.00	125	46-141	23	31
Isopropyl Ether (DIPE)	12.50	10.10	81	52-139	7	20
Ethyl tert-Butyl Ether (ETBE)	12.50	10.67	85	56-131	6	20
Methyl tert-Amyl Ether (TAME)	12.50	10.42	83	65-120	5	20
MTBE	12.50	12.02	96	59-123	6	20
1,2-Dichloroethane	12.50	13.48	108	71-135	5	20
Benzene	12.50	12.40	99	80-122	1	20
Toluene	12.50	12.51	100	80-120	2	20
1,2-Dibromoethane	12.50	13.06	104	79-120	5	20
Ethylbenzene	12.50	13.26	106	80-120	0	20
m,p-Xylenes	25.00	26.44	106	80-120	2	20
o-Xylene	12.50	13.12	105	80-120	4	20

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-127
1,2-Dichloroethane-d4	111	73-145
Toluene-d8	97	80-120
Bromofluorobenzene	105	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	177234
Units:	ug/L	Analyzed:	07/28/11
Diln Fac:	1.000		

Type: BS Lab ID: QC601932

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	1,093	109	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-127
1,2-Dichloroethane-d4	113	73-145
Toluene-d8	97	80-120
Bromofluorobenzene	100	80-120

Type: BSD Lab ID: QC601933

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,000	1,055	105	80-120	4	20

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-127
1,2-Dichloroethane-d4	115	73-145
Toluene-d8	100	80-120
Bromofluorobenzene	103	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC601934	Batch#:	177234
Matrix:	Water	Analyzed:	07/28/11
Units:	ug/L		

Analyte	Result	RL
Gasoline C7-C12	ND	50
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
Ethanol	ND	1,000
MTBE	ND	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-127
1,2-Dichloroethane-d4	118	73-145
Toluene-d8	99	80-120
Bromofluorobenzene	100	80-120

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	177278
Units:	ug/L	Analyzed:	07/29/11
Diln Fac:	1.000		

Type: BS Lab ID: QC602102

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	62.50	73.10	117	46-141
Isopropyl Ether (DIPE)	12.50	10.22	82	52-139
Ethyl tert-Butyl Ether (ETBE)	12.50	10.49	84	56-131
Methyl tert-Amyl Ether (TAME)	12.50	10.35	83	65-120
MTBE	12.50	11.84	95	59-123
1,2-Dichloroethane	12.50	13.87	111	71-135
Benzene	12.50	13.00	104	80-122
Toluene	12.50	12.87	103	80-120
1,2-Dibromoethane	12.50	13.54	108	79-120
Ethylbenzene	12.50	13.61	109	80-120
m,p-Xylenes	25.00	27.41	110	80-120
o-Xylene	12.50	12.82	103	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-127
1,2-Dichloroethane-d4	115	73-145
Toluene-d8	101	80-120
Bromofluorobenzene	102	80-120

Type: BSD Lab ID: QC602103

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	62.50	70.28	112	46-141	4	31
Isopropyl Ether (DIPE)	12.50	9.346	75	52-139	9	20
Ethyl tert-Butyl Ether (ETBE)	12.50	9.673	77	56-131	8	20
Methyl tert-Amyl Ether (TAME)	12.50	9.558	76	65-120	8	20
MTBE	12.50	10.60	85	59-123	11	20
1,2-Dichloroethane	12.50	13.58	109	71-135	2	20
Benzene	12.50	11.67	93	80-122	11	20
Toluene	12.50	11.64	93	80-120	10	20
1,2-Dibromoethane	12.50	12.07	97	79-120	12	20
Ethylbenzene	12.50	12.11	97	80-120	12	20
m,p-Xylenes	25.00	24.14	97	80-120	13	20
o-Xylene	12.50	11.48	92	80-120	11	20

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-127
1,2-Dichloroethane-d4	114	73-145
Toluene-d8	98	80-120
Bromofluorobenzene	102	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	177278
Units:	ug/L	Analyzed:	07/29/11
Diln Fac:	1.000		

Type: BS Lab ID: QC602104

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	953.3	95	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-127
1,2-Dichloroethane-d4	112	73-145
Toluene-d8	96	80-120
Bromofluorobenzene	102	80-120

Type: BSD Lab ID: QC602105

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,000	926.7	93	80-120	3	20

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-127
1,2-Dichloroethane-d4	111	73-145
Toluene-d8	96	80-120
Bromofluorobenzene	102	80-120

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Gasoline by GC/MS

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC602200	Batch#:	177278
Matrix:	Water	Analyzed:	07/29/11
Units:	ug/L		

Analyte	Result	RL
Gasoline C7-C12	ND	50
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
Ethanol	ND	1,000
MTBE	ND	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-127
1,2-Dichloroethane-d4	114	73-145
Toluene-d8	100	80-120
Bromofluorobenzene	99	80-120

ND= Not Detected
RL= Reporting Limit

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Instrument: MSVOA10.i

Sample Info: S,229640-031

Operator: VOA

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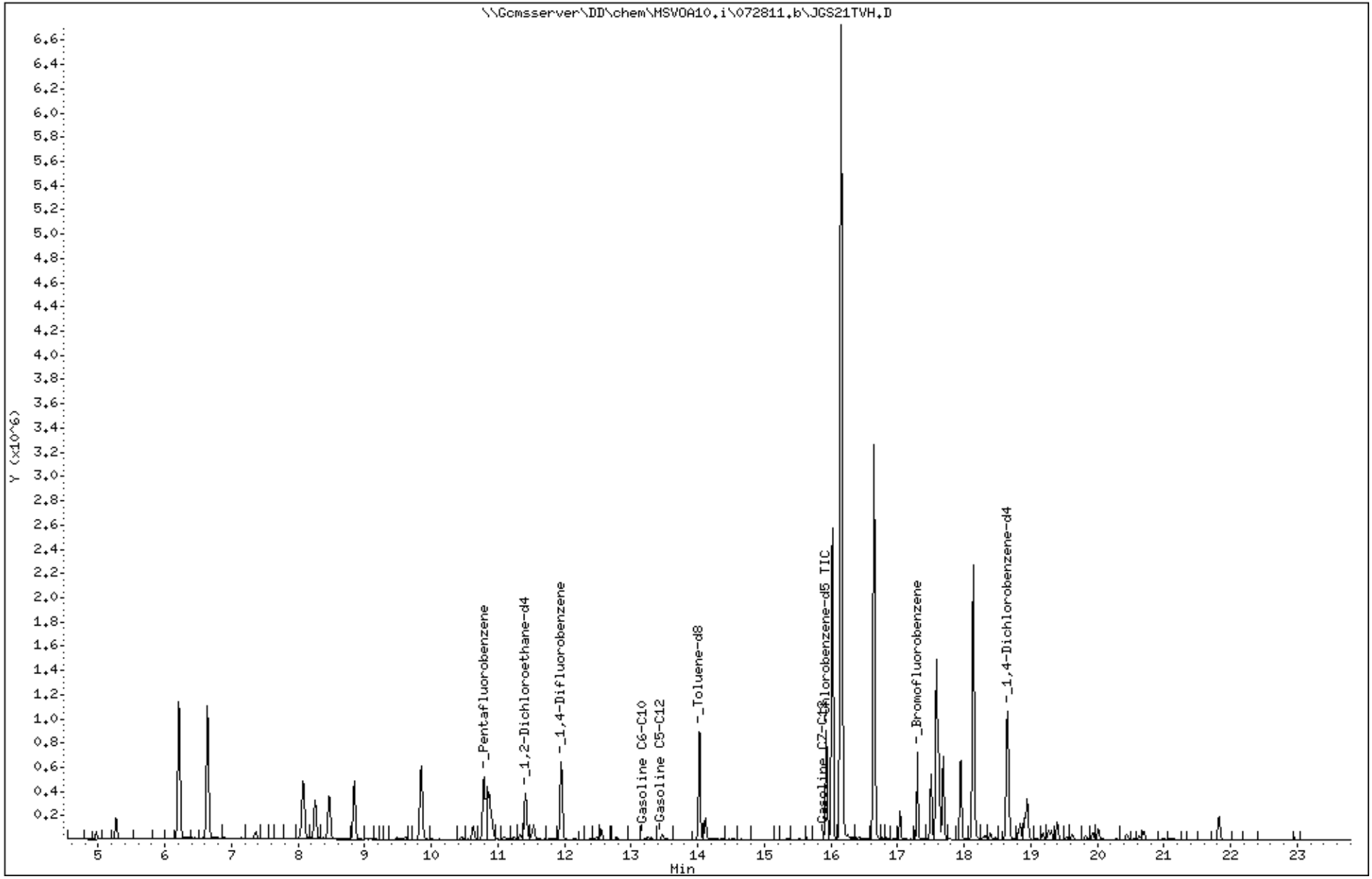

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Sample Info: S,229640-032

Operator: VOA

Column phase:

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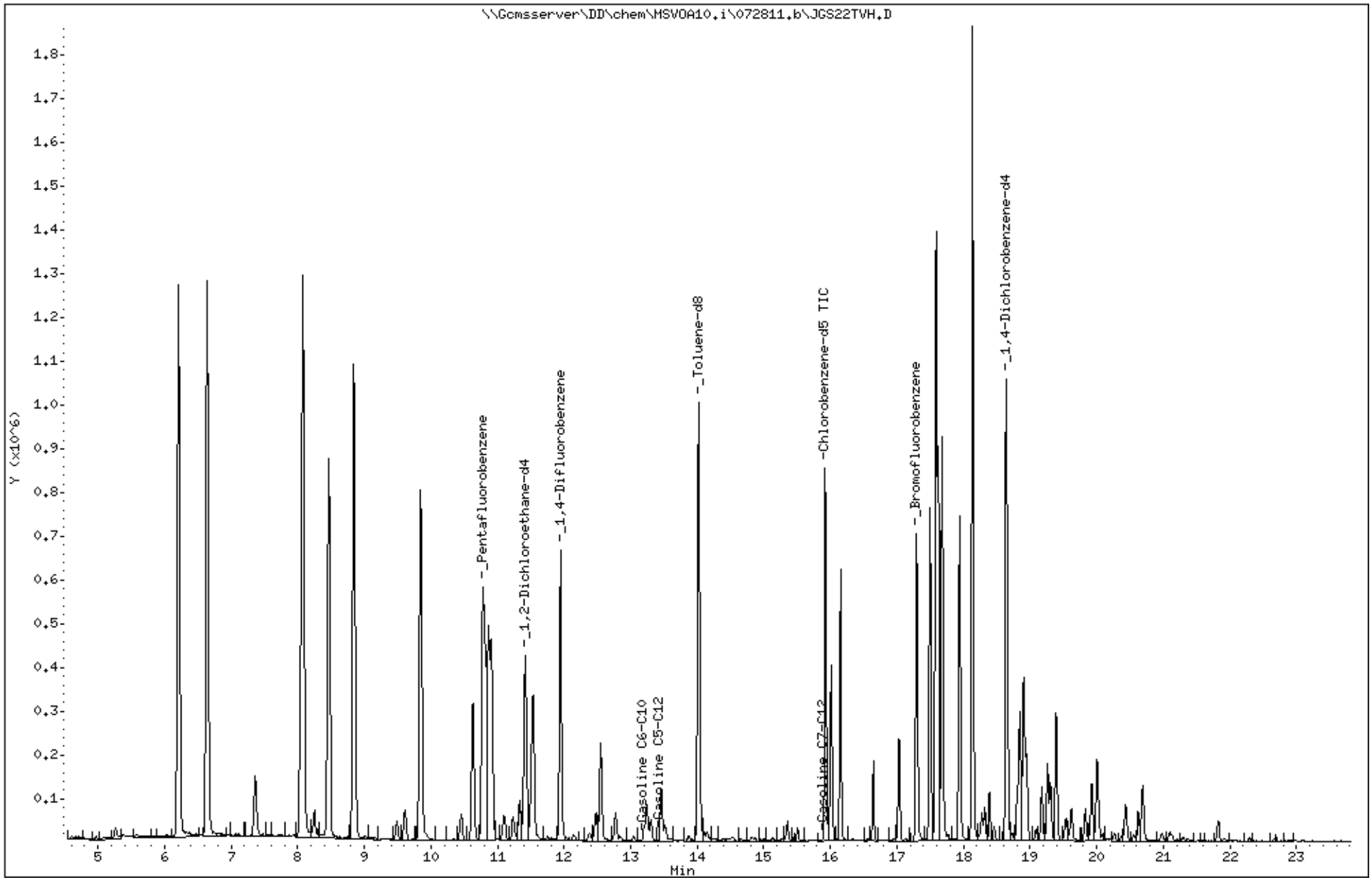

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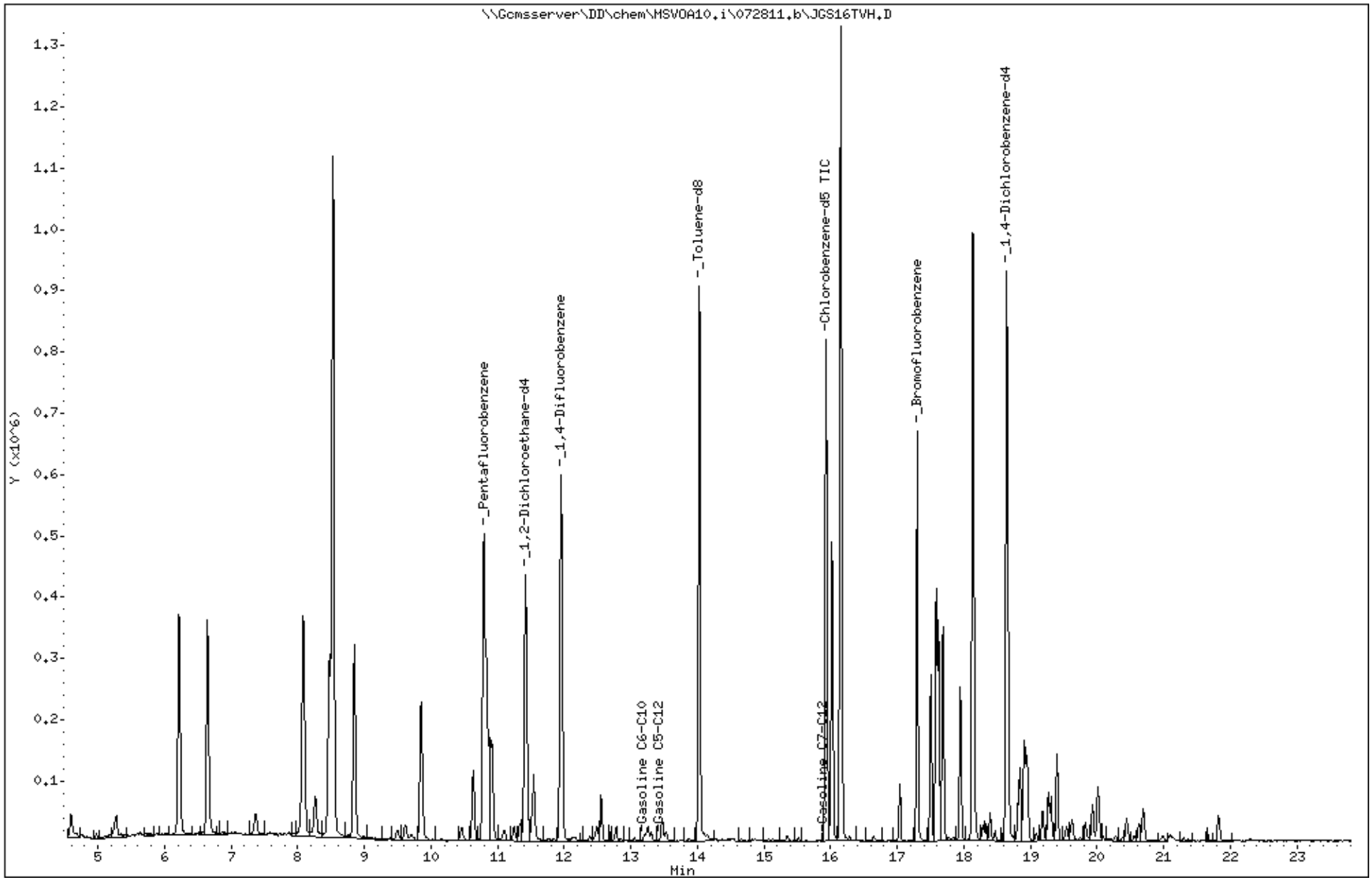
Instrument: MSVOA10.i

Sample Info: S,229640-033

Operator: VOA

Column phase:

Column diameter: 2.00



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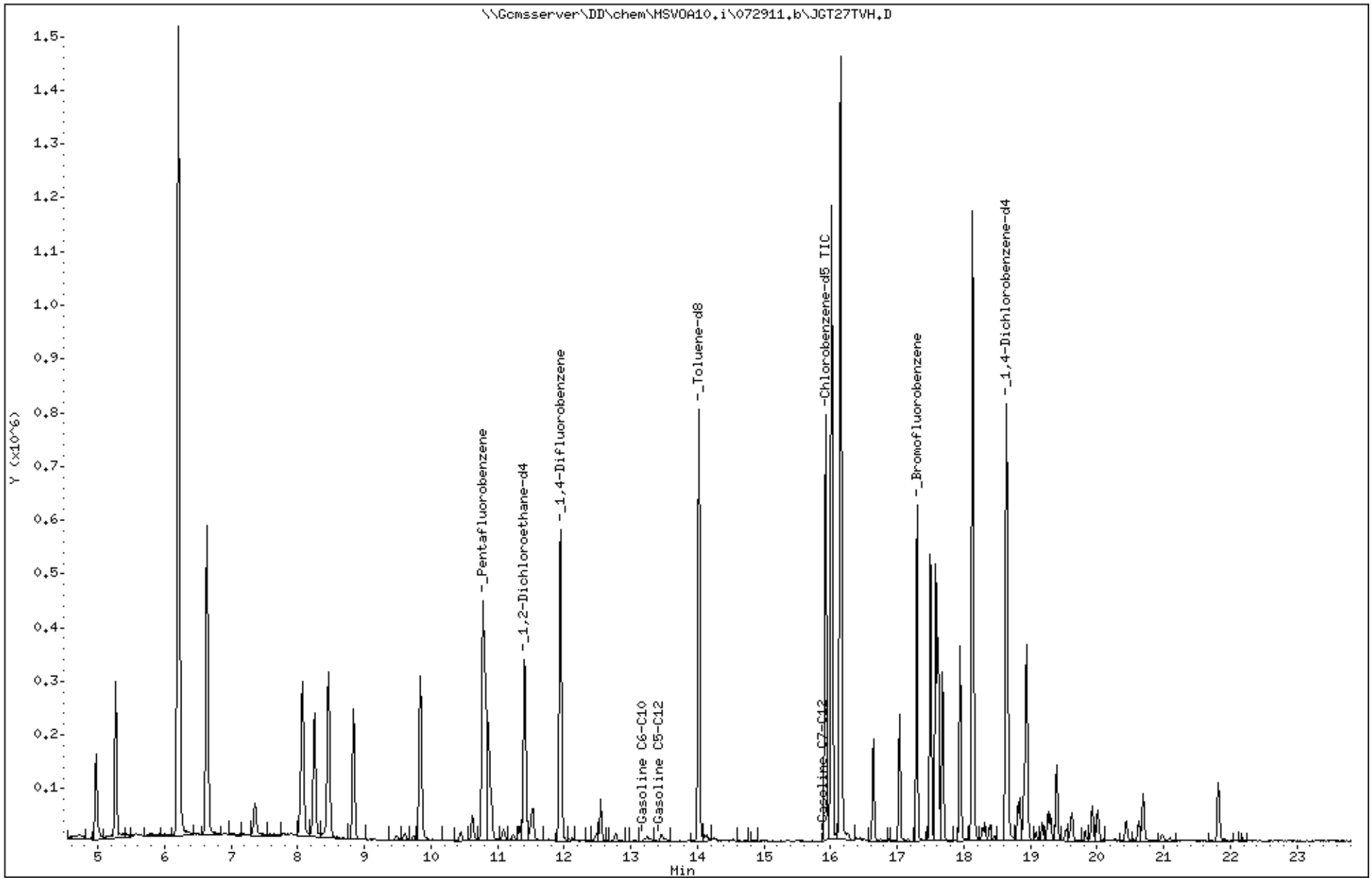
Sample Info: S,229640-034

Operator: VOA

Column phase:

Column diameter: 2.00



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Date : 30-JUL-2011 01:05

Client ID: DYNA P&T

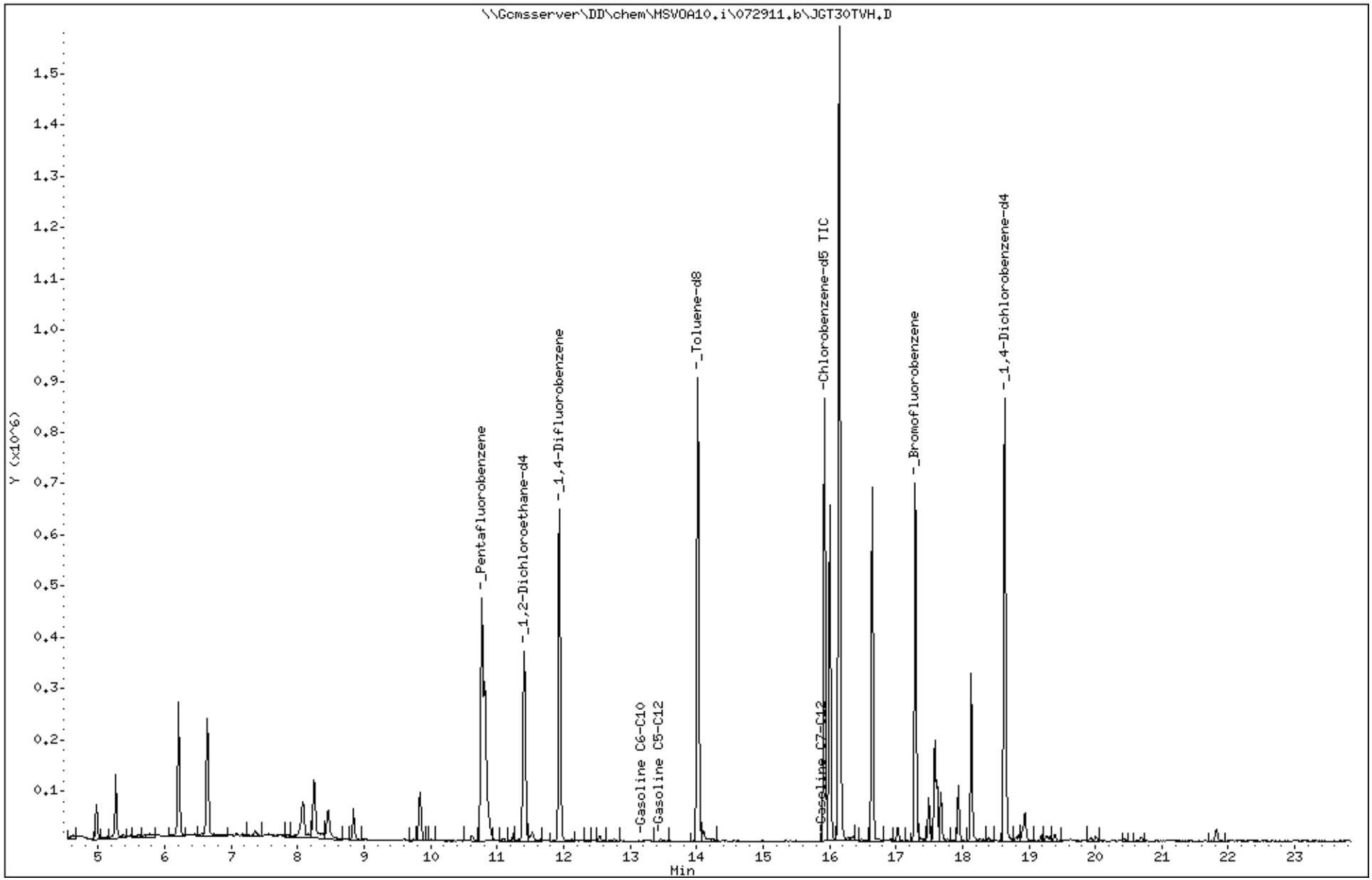
Instrument: MSVOA10.i

Sample Info: S,229640-035

Operator: VOA

Column phase:

Column diameter: 2.00



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Client ID: DYNA P&T

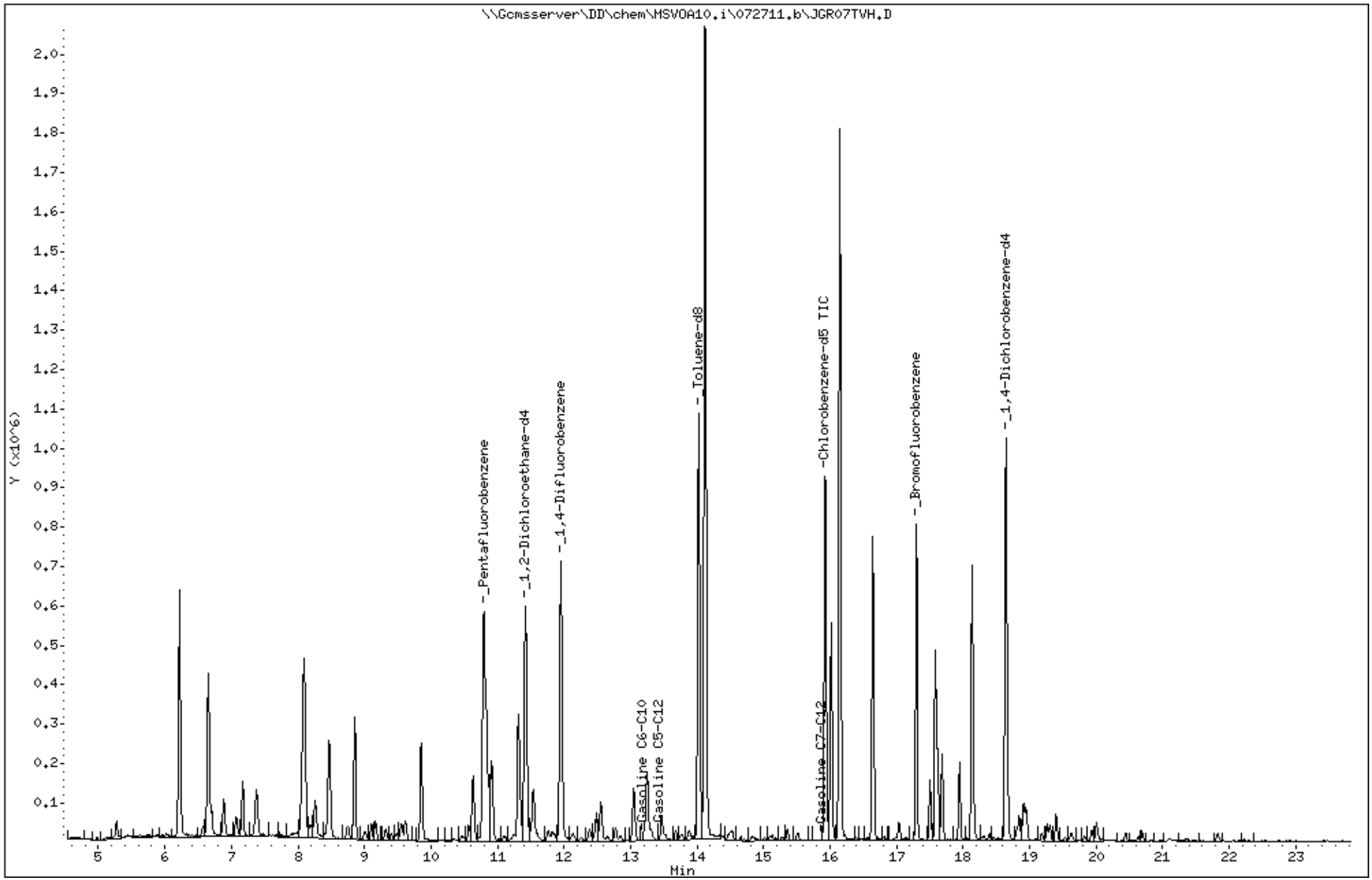
Instrument: MSVOA10.i

Sample Info: CCV/BS,QC601775,177194,S17254

Operator: VOA

Column phase:

Column diameter: 2.00



Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	DP-1@6.5FT	Diln Fac:	0.9634
Lab ID:	229640-001	Batch#:	177127
Matrix:	Soil	Sampled:	07/20/11
Units:	ug/Kg	Received:	07/22/11
Basis:	as received	Analyzed:	07/25/11

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	96
MTBE	ND	4.8
Isopropyl Ether (DIPE)	ND	4.8
Ethyl tert-Butyl Ether (ETBE)	ND	4.8
1,2-Dichloroethane	ND	4.8
Benzene	ND	4.8
Methyl tert-Amyl Ether (TAME)	ND	4.8
Ethanol	ND	960
Toluene	ND	4.8
1,2-Dibromoethane	ND	4.8
Ethylbenzene	ND	4.8
m,p-Xylenes	ND	4.8
o-Xylene	ND	4.8

Surrogate	%REC	Limits
Dibromofluoromethane	111	71-126
1,2-Dichloroethane-d4	128	74-130
Toluene-d8	97	80-120
Bromofluorobenzene	97	76-131

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	DP-1@16FT	Diln Fac:	0.9434
Lab ID:	229640-002	Batch#:	177127
Matrix:	Soil	Sampled:	07/20/11
Units:	ug/Kg	Received:	07/22/11
Basis:	as received	Analyzed:	07/25/11

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	94
MTBE	ND	4.7
Isopropyl Ether (DIPE)	ND	4.7
Ethyl tert-Butyl Ether (ETBE)	ND	4.7
1,2-Dichloroethane	ND	4.7
Benzene	ND	4.7
Methyl tert-Amyl Ether (TAME)	ND	4.7
Ethanol	ND	940
Toluene	ND	4.7
1,2-Dibromoethane	ND	4.7
Ethylbenzene	ND	4.7
m,p-Xylenes	ND	4.7
o-Xylene	ND	4.7

Surrogate	%REC	Limits
Dibromofluoromethane	109	71-126
1,2-Dichloroethane-d4	130	74-130
Toluene-d8	101	80-120
Bromofluorobenzene	102	76-131

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	DP-1@20FT	Diln Fac:	9.259
Lab ID:	229640-003	Batch#:	177240
Matrix:	Soil	Sampled:	07/20/11
Units:	ug/Kg	Received:	07/22/11
Basis:	as received	Analyzed:	07/28/11

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	930
MTBE	ND	46
Isopropyl Ether (DIPE)	ND	46
Ethyl tert-Butyl Ether (ETBE)	ND	46
1,2-Dichloroethane	ND	46
Benzene	ND	46
Methyl tert-Amyl Ether (TAME)	ND	46
Ethanol	ND	9,300
Toluene	ND	46
1,2-Dibromoethane	ND	46
Ethylbenzene	650	46
m,p-Xylenes	2,200	46
o-Xylene	740	46

Surrogate	%REC	Limits
Dibromofluoromethane	95	71-126
1,2-Dichloroethane-d4	85	74-130
Toluene-d8	104	80-120
Bromofluorobenzene	88	76-131

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	DP-1@22FT	Basis:	as received
Lab ID:	229640-004	Sampled:	07/20/11
Matrix:	Soil	Received:	07/22/11
Units:	ug/Kg		

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
tert-Butyl Alcohol (TBA)	ND	96	0.9634	177158	07/26/11
MTBE	ND	4.8	0.9634	177158	07/26/11
Isopropyl Ether (DIPE)	ND	4.8	0.9634	177158	07/26/11
Ethyl tert-Butyl Ether (ETBE)	ND	4.8	0.9634	177158	07/26/11
1,2-Dichloroethane	ND	4.8	0.9634	177158	07/26/11
Benzene	ND	4.8	0.9634	177158	07/26/11
Methyl tert-Amyl Ether (TAME)	ND	4.8	0.9634	177158	07/26/11
Ethanol	ND	960	0.9634	177158	07/26/11
Toluene	8.6	4.8	0.9634	177158	07/26/11
1,2-Dibromoethane	ND	4.8	0.9634	177158	07/26/11
Ethylbenzene	140	4.8	0.9634	177158	07/26/11
m,p-Xylenes	830	25	4.902	177202	07/27/11
o-Xylene	320	25	4.902	177202	07/27/11

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	99	71-126	0.9634	177158	07/26/11
1,2-Dichloroethane-d4	100	74-130	0.9634	177158	07/26/11
Toluene-d8	101	80-120	0.9634	177158	07/26/11
Bromofluorobenzene	95	76-131	0.9634	177158	07/26/11

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	DP-1@23FT	Diln Fac:	0.9690
Lab ID:	229640-005	Batch#:	177158
Matrix:	Soil	Sampled:	07/20/11
Units:	ug/Kg	Received:	07/22/11
Basis:	as received	Analyzed:	07/27/11

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	97
MTBE	ND	4.8
Isopropyl Ether (DIPE)	ND	4.8
Ethyl tert-Butyl Ether (ETBE)	ND	4.8
1,2-Dichloroethane	ND	4.8
Benzene	ND	4.8
Methyl tert-Amyl Ether (TAME)	ND	4.8
Ethanol	ND	970
Toluene	ND	4.8
1,2-Dibromoethane	ND	4.8
Ethylbenzene	10	4.8
m,p-Xylenes	20	4.8
o-Xylene	5.3	4.8

Surrogate	%REC	Limits
Dibromofluoromethane	89	71-126
1,2-Dichloroethane-d4	101	74-130
Toluene-d8	104	80-120
Bromofluorobenzene	98	76-131

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	DP-1@30FT	Diln Fac:	0.8834
Lab ID:	229640-006	Batch#:	177158
Matrix:	Soil	Sampled:	07/20/11
Units:	ug/Kg	Received:	07/22/11
Basis:	as received	Analyzed:	07/27/11

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	88
MTBE	ND	4.4
Isopropyl Ether (DIPE)	ND	4.4
Ethyl tert-Butyl Ether (ETBE)	ND	4.4
1,2-Dichloroethane	ND	4.4
Benzene	ND	4.4
Methyl tert-Amyl Ether (TAME)	ND	4.4
Ethanol	ND	880
Toluene	ND	4.4
1,2-Dibromoethane	ND	4.4
Ethylbenzene	24	4.4
m,p-Xylenes	84	4.4
o-Xylene	38	4.4

Surrogate	%REC	Limits
Dibromofluoromethane	94	71-126
1,2-Dichloroethane-d4	99	74-130
Toluene-d8	107	80-120
Bromofluorobenzene	93	76-131

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	DP-2@8FT	Diln Fac:	0.9363
Lab ID:	229640-007	Batch#:	177158
Matrix:	Soil	Sampled:	07/20/11
Units:	ug/Kg	Received:	07/22/11
Basis:	as received	Analyzed:	07/27/11

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	94
MTBE	ND	4.7
Isopropyl Ether (DIPE)	ND	4.7
Ethyl tert-Butyl Ether (ETBE)	ND	4.7
1,2-Dichloroethane	ND	4.7
Benzene	ND	4.7
Methyl tert-Amyl Ether (TAME)	ND	4.7
Ethanol	ND	940
Toluene	ND	4.7
1,2-Dibromoethane	ND	4.7
Ethylbenzene	ND	4.7
m,p-Xylenes	ND	4.7
o-Xylene	ND	4.7

Surrogate	%REC	Limits
Dibromofluoromethane	103	71-126
1,2-Dichloroethane-d4	113	74-130
Toluene-d8	104	80-120
Bromofluorobenzene	102	76-131

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	DP-2@10FT	Diln Fac:	0.9363
Lab ID:	229640-008	Batch#:	177237
Matrix:	Soil	Sampled:	07/20/11
Units:	ug/Kg	Received:	07/22/11
Basis:	as received	Analyzed:	07/28/11

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	94
MTBE	ND	4.7
Isopropyl Ether (DIPE)	ND	4.7
Ethyl tert-Butyl Ether (ETBE)	ND	4.7
1,2-Dichloroethane	ND	4.7
Benzene	ND	4.7
Methyl tert-Amyl Ether (TAME)	ND	4.7
Ethanol	ND	940
Toluene	ND	4.7
1,2-Dibromoethane	ND	4.7
Ethylbenzene	ND	4.7
m,p-Xylenes	ND	4.7
o-Xylene	ND	4.7

Surrogate	%REC	Limits
Dibromofluoromethane	109	71-126
1,2-Dichloroethane-d4	87	74-130
Toluene-d8	96	80-120
Bromofluorobenzene	108	76-131

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	DP-2@20FT	Diln Fac:	0.9259
Lab ID:	229640-009	Batch#:	177237
Matrix:	Soil	Sampled:	07/20/11
Units:	ug/Kg	Received:	07/22/11
Basis:	as received	Analyzed:	07/28/11

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	93
MTBE	ND	4.6
Isopropyl Ether (DIPE)	ND	4.6
Ethyl tert-Butyl Ether (ETBE)	ND	4.6
1,2-Dichloroethane	ND	4.6
Benzene	ND	4.6
Methyl tert-Amyl Ether (TAME)	ND	4.6
Ethanol	ND	930
Toluene	ND	4.6
1,2-Dibromoethane	ND	4.6
Ethylbenzene	ND	4.6
m,p-Xylenes	ND	4.6
o-Xylene	ND	4.6

Surrogate	%REC	Limits
Dibromofluoromethane	116	71-126
1,2-Dichloroethane-d4	92	74-130
Toluene-d8	94	80-120
Bromofluorobenzene	108	76-131

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	DP-2@24FT	Diln Fac:	0.9823
Lab ID:	229640-010	Batch#:	177158
Matrix:	Soil	Sampled:	07/20/11
Units:	ug/Kg	Received:	07/22/11
Basis:	as received	Analyzed:	07/26/11

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	98
MTBE	ND	4.9
Isopropyl Ether (DIPE)	ND	4.9
Ethyl tert-Butyl Ether (ETBE)	ND	4.9
1,2-Dichloroethane	ND	4.9
Benzene	ND	4.9
Methyl tert-Amyl Ether (TAME)	ND	4.9
Ethanol	ND	980
Toluene	ND	4.9
1,2-Dibromoethane	ND	4.9
Ethylbenzene	ND	4.9
m,p-Xylenes	ND	4.9
o-Xylene	ND	4.9

Surrogate	%REC	Limits
Dibromofluoromethane	87	71-126
1,2-Dichloroethane-d4	95	74-130
Toluene-d8	102	80-120
Bromofluorobenzene	101	76-131

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	DP-2@28FT	Diln Fac:	0.9488
Lab ID:	229640-011	Batch#:	177202
Matrix:	Soil	Sampled:	07/20/11
Units:	ug/Kg	Received:	07/22/11
Basis:	as received	Analyzed:	07/27/11

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	95
MTBE	ND	4.7
Isopropyl Ether (DIPE)	ND	4.7
Ethyl tert-Butyl Ether (ETBE)	ND	4.7
1,2-Dichloroethane	ND	4.7
Benzene	ND	4.7
Methyl tert-Amyl Ether (TAME)	ND	4.7
Ethanol	ND	950
Toluene	ND	4.7
1,2-Dibromoethane	ND	4.7
Ethylbenzene	34	4.7
m,p-Xylenes	42	4.7
o-Xylene	ND	4.7

Surrogate	%REC	Limits
Dibromofluoromethane	93	71-126
1,2-Dichloroethane-d4	105	74-130
Toluene-d8	105	80-120
Bromofluorobenzene	100	76-131

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	DP-2@30FT	Diln Fac:	0.9398
Lab ID:	229640-012	Batch#:	177237
Matrix:	Soil	Sampled:	07/20/11
Units:	ug/Kg	Received:	07/22/11
Basis:	as received	Analyzed:	07/28/11

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	94
MTBE	ND	4.7
Isopropyl Ether (DIPE)	ND	4.7
Ethyl tert-Butyl Ether (ETBE)	ND	4.7
1,2-Dichloroethane	ND	4.7
Benzene	ND	4.7
Methyl tert-Amyl Ether (TAME)	ND	4.7
Ethanol	ND	940
Toluene	ND	4.7
1,2-Dibromoethane	ND	4.7
Ethylbenzene	7.1	4.7
m,p-Xylenes	ND	4.7
o-Xylene	ND	4.7

Surrogate	%REC	Limits
Dibromofluoromethane	115	71-126
1,2-Dichloroethane-d4	87	74-130
Toluene-d8	93	80-120
Bromofluorobenzene	101	76-131

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	DP-3@6FT	Diln Fac:	0.9940
Lab ID:	229640-013	Batch#:	177237
Matrix:	Soil	Sampled:	07/21/11
Units:	ug/Kg	Received:	07/22/11
Basis:	as received	Analyzed:	07/28/11

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	99
MTBE	ND	5.0
Isopropyl Ether (DIPE)	ND	5.0
Ethyl tert-Butyl Ether (ETBE)	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Methyl tert-Amyl Ether (TAME)	ND	5.0
Ethanol	ND	990
Toluene	ND	5.0
1,2-Dibromoethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	108	71-126
1,2-Dichloroethane-d4	85	74-130
Toluene-d8	98	80-120
Bromofluorobenzene	103	76-131

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	DP-3@12FT	Diln Fac:	0.9597
Lab ID:	229640-014	Batch#:	177237
Matrix:	Soil	Sampled:	07/21/11
Units:	ug/Kg	Received:	07/22/11
Basis:	as received	Analyzed:	07/28/11

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	96
MTBE	ND	4.8
Isopropyl Ether (DIPE)	ND	4.8
Ethyl tert-Butyl Ether (ETBE)	ND	4.8
1,2-Dichloroethane	ND	4.8
Benzene	ND	4.8
Methyl tert-Amyl Ether (TAME)	ND	4.8
Ethanol	ND	960
Toluene	ND	4.8
1,2-Dibromoethane	ND	4.8
Ethylbenzene	ND	4.8
m,p-Xylenes	ND	4.8
o-Xylene	ND	4.8

Surrogate	%REC	Limits
Dibromofluoromethane	112	71-126
1,2-Dichloroethane-d4	85	74-130
Toluene-d8	96	80-120
Bromofluorobenzene	105	76-131

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	DP-3@20FT	Diln Fac:	0.9524
Lab ID:	229640-015	Batch#:	177237
Matrix:	Soil	Sampled:	07/21/11
Units:	ug/Kg	Received:	07/22/11
Basis:	as received	Analyzed:	07/28/11

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	95
MTBE	ND	4.8
Isopropyl Ether (DIPE)	ND	4.8
Ethyl tert-Butyl Ether (ETBE)	ND	4.8
1,2-Dichloroethane	ND	4.8
Benzene	ND	4.8
Methyl tert-Amyl Ether (TAME)	ND	4.8
Ethanol	ND	950
Toluene	ND	4.8
1,2-Dibromoethane	ND	4.8
Ethylbenzene	100	4.8
m,p-Xylenes	280	4.8
o-Xylene	ND	4.8

Surrogate	%REC	Limits
Dibromofluoromethane	108	71-126
1,2-Dichloroethane-d4	95	74-130
Toluene-d8	92	80-120
Bromofluorobenzene	103	76-131

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	DP-3@21FT	Diln Fac:	0.9259
Lab ID:	229640-016	Batch#:	177237
Matrix:	Soil	Sampled:	07/21/11
Units:	ug/Kg	Received:	07/22/11
Basis:	as received	Analyzed:	07/28/11

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	93
MTBE	5.1	4.6
Isopropyl Ether (DIPE)	ND	4.6
Ethyl tert-Butyl Ether (ETBE)	ND	4.6
1,2-Dichloroethane	ND	4.6
Benzene	ND	4.6
Methyl tert-Amyl Ether (TAME)	ND	4.6
Ethanol	ND	930
Toluene	ND	4.6
1,2-Dibromoethane	ND	4.6
Ethylbenzene	ND	4.6
m,p-Xylenes	ND	4.6
o-Xylene	ND	4.6

Surrogate	%REC	Limits
Dibromofluoromethane	101	71-126
1,2-Dichloroethane-d4	76	74-130
Toluene-d8	92	80-120
Bromofluorobenzene	98	76-131

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	DP-3@30FT	Diln Fac:	0.9881
Lab ID:	229640-017	Batch#:	177237
Matrix:	Soil	Sampled:	07/21/11
Units:	ug/Kg	Received:	07/22/11
Basis:	as received	Analyzed:	07/28/11

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	99
MTBE	ND	4.9
Isopropyl Ether (DIPE)	ND	4.9
Ethyl tert-Butyl Ether (ETBE)	ND	4.9
1,2-Dichloroethane	ND	4.9
Benzene	ND	4.9
Methyl tert-Amyl Ether (TAME)	ND	4.9
Ethanol	ND	990
Toluene	ND	4.9
1,2-Dibromoethane	ND	4.9
Ethylbenzene	ND	4.9
m,p-Xylenes	ND	4.9
o-Xylene	ND	4.9

Surrogate	%REC	Limits
Dibromofluoromethane	103	71-126
1,2-Dichloroethane-d4	81	74-130
Toluene-d8	94	80-120
Bromofluorobenzene	93	76-131

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	DP-4@8FT	Diln Fac:	0.9259
Lab ID:	229640-018	Batch#:	177237
Matrix:	Soil	Sampled:	07/21/11
Units:	ug/Kg	Received:	07/22/11
Basis:	as received	Analyzed:	07/28/11

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	93
MTBE	ND	4.6
Isopropyl Ether (DIPE)	ND	4.6
Ethyl tert-Butyl Ether (ETBE)	ND	4.6
1,2-Dichloroethane	ND	4.6
Benzene	ND	4.6
Methyl tert-Amyl Ether (TAME)	ND	4.6
Ethanol	ND	930
Toluene	ND	4.6
1,2-Dibromoethane	ND	4.6
Ethylbenzene	ND	4.6
m,p-Xylenes	ND	4.6
o-Xylene	ND	4.6

Surrogate	%REC	Limits
Dibromofluoromethane	102	71-126
1,2-Dichloroethane-d4	82	74-130
Toluene-d8	95	80-120
Bromofluorobenzene	99	76-131

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	DP-4@11FT	Diln Fac:	0.9506
Lab ID:	229640-019	Batch#:	177237
Matrix:	Soil	Sampled:	07/21/11
Units:	ug/Kg	Received:	07/22/11
Basis:	as received	Analyzed:	07/28/11

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	95
MTBE	ND	4.8
Isopropyl Ether (DIPE)	ND	4.8
Ethyl tert-Butyl Ether (ETBE)	ND	4.8
1,2-Dichloroethane	ND	4.8
Benzene	ND	4.8
Methyl tert-Amyl Ether (TAME)	ND	4.8
Ethanol	ND	950
Toluene	ND	4.8
1,2-Dibromoethane	ND	4.8
Ethylbenzene	ND	4.8
m,p-Xylenes	ND	4.8
o-Xylene	ND	4.8

Surrogate	%REC	Limits
Dibromofluoromethane	105	71-126
1,2-Dichloroethane-d4	85	74-130
Toluene-d8	99	80-120
Bromofluorobenzene	96	76-131

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	DP-4@16FT	Diln Fac:	0.9785
Lab ID:	229640-020	Batch#:	177237
Matrix:	Soil	Sampled:	07/21/11
Units:	ug/Kg	Received:	07/22/11
Basis:	as received	Analyzed:	07/28/11

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	98
MTBE	ND	4.9
Isopropyl Ether (DIPE)	ND	4.9
Ethyl tert-Butyl Ether (ETBE)	ND	4.9
1,2-Dichloroethane	ND	4.9
Benzene	ND	4.9
Methyl tert-Amyl Ether (TAME)	ND	4.9
Ethanol	ND	980
Toluene	ND	4.9
1,2-Dibromoethane	ND	4.9
Ethylbenzene	ND	4.9
m,p-Xylenes	ND	4.9
o-Xylene	ND	4.9

Surrogate	%REC	Limits
Dibromofluoromethane	109	71-126
1,2-Dichloroethane-d4	84	74-130
Toluene-d8	95	80-120
Bromofluorobenzene	100	76-131

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	DP-4@20FT	Diln Fac:	0.9242
Lab ID:	229640-021	Batch#:	177237
Matrix:	Soil	Sampled:	07/21/11
Units:	ug/Kg	Received:	07/22/11
Basis:	as received	Analyzed:	07/28/11

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	92
MTBE	ND	4.6
Isopropyl Ether (DIPE)	ND	4.6
Ethyl tert-Butyl Ether (ETBE)	ND	4.6
1,2-Dichloroethane	ND	4.6
Benzene	ND	4.6
Methyl tert-Amyl Ether (TAME)	ND	4.6
Ethanol	ND	920
Toluene	ND	4.6
1,2-Dibromoethane	ND	4.6
Ethylbenzene	ND	4.6
m,p-Xylenes	ND	4.6
o-Xylene	ND	4.6

Surrogate	%REC	Limits
Dibromofluoromethane	111	71-126
1,2-Dichloroethane-d4	84	74-130
Toluene-d8	92	80-120
Bromofluorobenzene	99	76-131

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	DP-4@24FT	Diln Fac:	50.00
Lab ID:	229640-022	Batch#:	177322
Matrix:	Soil	Sampled:	07/21/11
Units:	ug/Kg	Received:	07/22/11
Basis:	as received	Analyzed:	07/31/11

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	5,000
MTBE	ND	250
Isopropyl Ether (DIPE)	ND	250
Ethyl tert-Butyl Ether (ETBE)	ND	250
1,2-Dichloroethane	ND	250
Benzene	ND	250
Methyl tert-Amyl Ether (TAME)	ND	250
Ethanol	ND	50,000
Toluene	ND	250
1,2-Dibromoethane	ND	250
Ethylbenzene	5,400	250
m,p-Xylenes	7,500	250
o-Xylene	470	250

Surrogate	%REC	Limits
Dibromofluoromethane	105	71-126
1,2-Dichloroethane-d4	79	74-130
Toluene-d8	94	80-120
Bromofluorobenzene	100	76-131
Trifluorotoluene (MeOH)	92	58-142

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	DP-4@26FT	Diln Fac:	50.00
Lab ID:	229640-023	Batch#:	177322
Matrix:	Soil	Sampled:	07/21/11
Units:	ug/Kg	Received:	07/22/11
Basis:	as received	Analyzed:	07/31/11

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	5,000
MTBE	ND	250
Isopropyl Ether (DIPE)	ND	250
Ethyl tert-Butyl Ether (ETBE)	ND	250
1,2-Dichloroethane	ND	250
Benzene	ND	250
Methyl tert-Amyl Ether (TAME)	ND	250
Ethanol	ND	50,000
Toluene	ND	250
1,2-Dibromoethane	ND	250
Ethylbenzene	2,200	250
m,p-Xylenes	5,800	250
o-Xylene	990	250

Surrogate	%REC	Limits
Dibromofluoromethane	101	71-126
1,2-Dichloroethane-d4	77	74-130
Toluene-d8	93	80-120
Bromofluorobenzene	97	76-131
Trifluorotoluene (MeOH)	96	58-142

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	DP-4@30FT	Diln Fac:	0.9597
Lab ID:	229640-024	Batch#:	177240
Matrix:	Soil	Sampled:	07/21/11
Units:	ug/Kg	Received:	07/22/11
Basis:	as received	Analyzed:	07/28/11

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	96
MTBE	ND	4.8
Isopropyl Ether (DIPE)	ND	4.8
Ethyl tert-Butyl Ether (ETBE)	ND	4.8
1,2-Dichloroethane	ND	4.8
Benzene	ND	4.8
Methyl tert-Amyl Ether (TAME)	ND	4.8
Ethanol	ND	960
Toluene	ND	4.8
1,2-Dibromoethane	ND	4.8
Ethylbenzene	ND	4.8
m,p-Xylenes	ND	4.8
o-Xylene	ND	4.8

Surrogate	%REC	Limits
Dibromofluoromethane	95	71-126
1,2-Dichloroethane-d4	85	74-130
Toluene-d8	102	80-120
Bromofluorobenzene	87	76-131

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	DP-5@7.5FT	Diln Fac:	0.9597
Lab ID:	229640-025	Batch#:	177240
Matrix:	Soil	Sampled:	07/20/11
Units:	ug/Kg	Received:	07/22/11
Basis:	as received	Analyzed:	07/28/11

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	96
MTBE	ND	4.8
Isopropyl Ether (DIPE)	ND	4.8
Ethyl tert-Butyl Ether (ETBE)	ND	4.8
1,2-Dichloroethane	ND	4.8
Benzene	ND	4.8
Methyl tert-Amyl Ether (TAME)	ND	4.8
Ethanol	ND	960
Toluene	ND	4.8
1,2-Dibromoethane	ND	4.8
Ethylbenzene	ND	4.8
m,p-Xylenes	ND	4.8
o-Xylene	ND	4.8

Surrogate	%REC	Limits
Dibromofluoromethane	104	71-126
1,2-Dichloroethane-d4	90	74-130
Toluene-d8	103	80-120
Bromofluorobenzene	88	76-131

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	DP-5@10.5FT	Diln Fac:	0.9452
Lab ID:	229640-026	Batch#:	177212
Matrix:	Soil	Sampled:	07/20/11
Units:	ug/Kg	Received:	07/22/11
Basis:	as received	Analyzed:	07/27/11

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	95
MTBE	ND	4.7
Isopropyl Ether (DIPE)	ND	4.7
Ethyl tert-Butyl Ether (ETBE)	ND	4.7
1,2-Dichloroethane	ND	4.7
Benzene	ND	4.7
Methyl tert-Amyl Ether (TAME)	ND	4.7
Ethanol	ND	950
Toluene	ND	4.7
1,2-Dibromoethane	ND	4.7
Ethylbenzene	ND	4.7
m,p-Xylenes	ND	4.7
o-Xylene	ND	4.7

Surrogate	%REC	Limits
Dibromofluoromethane	116	71-126
1,2-Dichloroethane-d4	96	74-130
Toluene-d8	96	80-120
Bromofluorobenzene	105	76-131

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	DP-5@12.5FT	Diln Fac:	0.9690
Lab ID:	229640-027	Batch#:	177212
Matrix:	Soil	Sampled:	07/20/11
Units:	ug/Kg	Received:	07/22/11
Basis:	as received	Analyzed:	07/27/11

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	97
MTBE	ND	4.8
Isopropyl Ether (DIPE)	ND	4.8
Ethyl tert-Butyl Ether (ETBE)	ND	4.8
1,2-Dichloroethane	ND	4.8
Benzene	ND	4.8
Methyl tert-Amyl Ether (TAME)	ND	4.8
Ethanol	ND	970
Toluene	ND	4.8
1,2-Dibromoethane	ND	4.8
Ethylbenzene	ND	4.8
m,p-Xylenes	ND	4.8
o-Xylene	ND	4.8

Surrogate	%REC	Limits
Dibromofluoromethane	111	71-126
1,2-Dichloroethane-d4	94	74-130
Toluene-d8	98	80-120
Bromofluorobenzene	100	76-131

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	DP-5@23FT	Basis:	as received
Lab ID:	229640-028	Sampled:	07/20/11
Matrix:	Soil	Received:	07/22/11
Units:	ug/Kg		

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
tert-Butyl Alcohol (TBA)	ND	93	0.9346	177212	07/27/11
MTBE	ND	4.7	0.9346	177212	07/27/11
Isopropyl Ether (DIPE)	ND	4.7	0.9346	177212	07/27/11
Ethyl tert-Butyl Ether (ETBE)	ND	4.7	0.9346	177212	07/27/11
1,2-Dichloroethane	ND	4.7	0.9346	177212	07/27/11
Benzene	ND	4.7	0.9346	177212	07/27/11
Methyl tert-Amyl Ether (TAME)	ND	4.7	0.9346	177212	07/27/11
Ethanol	ND	930	0.9346	177212	07/27/11
Toluene	ND	4.7	0.9346	177212	07/27/11
1,2-Dibromoethane	ND	4.7	0.9346	177212	07/27/11
Ethylbenzene	1,600	50	10.00	177432	08/03/11
m,p-Xylenes	1,800	50	10.00	177432	08/03/11
o-Xylene	ND	4.7	0.9346	177212	07/27/11

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	105	71-126	0.9346	177212	07/27/11
1,2-Dichloroethane-d4	97	74-130	0.9346	177212	07/27/11
Toluene-d8	93	80-120	0.9346	177212	07/27/11
Bromofluorobenzene	102	76-131	0.9346	177212	07/27/11

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	DP-5@28FT	Diln Fac:	0.9294
Lab ID:	229640-029	Batch#:	177212
Matrix:	Soil	Sampled:	07/20/11
Units:	ug/Kg	Received:	07/22/11
Basis:	as received	Analyzed:	07/27/11

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	93
MTBE	ND	4.6
Isopropyl Ether (DIPE)	ND	4.6
Ethyl tert-Butyl Ether (ETBE)	ND	4.6
1,2-Dichloroethane	ND	4.6
Benzene	ND	4.6
Methyl tert-Amyl Ether (TAME)	ND	4.6
Ethanol	ND	930
Toluene	ND	4.6
1,2-Dibromoethane	ND	4.6
Ethylbenzene	26	4.6
m,p-Xylenes	99	4.6
o-Xylene	11	4.6

Surrogate	%REC	Limits
Dibromofluoromethane	103	71-126
1,2-Dichloroethane-d4	83	74-130
Toluene-d8	96	80-120
Bromofluorobenzene	97	76-131

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	DP-5@30FT	Diln Fac:	0.9785
Lab ID:	229640-030	Batch#:	177240
Matrix:	Soil	Sampled:	07/20/11
Units:	ug/Kg	Received:	07/22/11
Basis:	as received	Analyzed:	07/28/11

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	98
MTBE	ND	4.9
Isopropyl Ether (DIPE)	ND	4.9
Ethyl tert-Butyl Ether (ETBE)	ND	4.9
1,2-Dichloroethane	ND	4.9
Benzene	ND	4.9
Methyl tert-Amyl Ether (TAME)	ND	4.9
Ethanol	ND	980
Toluene	ND	4.9
1,2-Dibromoethane	ND	4.9
Ethylbenzene	ND	4.9
m,p-Xylenes	ND	4.9
o-Xylene	ND	4.9

Surrogate	%REC	Limits
Dibromofluoromethane	98	71-126
1,2-Dichloroethane-d4	88	74-130
Toluene-d8	104	80-120
Bromofluorobenzene	89	76-131

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC601474	Batch#:	177127
Matrix:	Soil	Analyzed:	07/25/11
Units:	ug/Kg		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	100
MTBE	ND	5.0
Isopropyl Ether (DIPE)	ND	5.0
Ethyl tert-Butyl Ether (ETBE)	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Methyl tert-Amyl Ether (TAME)	ND	5.0
Ethanol	ND	1,000
Toluene	ND	5.0
1,2-Dibromoethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	106	71-126
1,2-Dichloroethane-d4	122	74-130
Toluene-d8	102	80-120
Bromofluorobenzene	105	76-131

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC601475	Batch#:	177127
Matrix:	Soil	Analyzed:	07/25/11
Units:	ug/Kg		

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	100.0	91.95	92	44-138
MTBE	20.00	17.52	88	59-120
Isopropyl Ether (DIPE)	20.00	14.98	75	54-130
Ethyl tert-Butyl Ether (ETBE)	20.00	17.27	86	58-124
1,2-Dichloroethane	20.00	22.84	114	71-126
Benzene	20.00	17.94	90	80-122
Methyl tert-Amyl Ether (TAME)	20.00	16.33	82	63-120
Toluene	20.00	18.31	92	80-120
1,2-Dibromoethane	20.00	19.68	98	78-120
Ethylbenzene	20.00	19.41	97	80-122
m,p-Xylenes	40.00	37.36	93	79-126
o-Xylene	20.00	18.31	92	79-122

Surrogate	%REC	Limits
Dibromofluoromethane	113	71-126
1,2-Dichloroethane-d4	117	74-130
Toluene-d8	102	80-120
Bromofluorobenzene	101	76-131

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	DP-1@6.5FT	Batch#:	177127
MSS Lab ID:	229640-001	Sampled:	07/20/11
Matrix:	Soil	Received:	07/22/11
Units:	ug/Kg	Analyzed:	07/25/11
Basis:	as received		

Type: MS
Lab ID: QC601476
Diln Fac: 0.9452

Analyte	MSS Result	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	<15.02	236.3	227.8	96	45-131
MTBE	<1.452	47.26	39.82	84	52-120
Isopropyl Ether (DIPE)	<1.239	47.26	31.11	66	53-120
Ethyl tert-Butyl Ether (ETBE)	<0.9337	47.26	39.35	83	53-120
1,2-Dichloroethane	<0.8977	47.26	53.46	113	58-122
Benzene	<0.9314	47.26	44.00	93	62-123
Methyl tert-Amyl Ether (TAME)	<0.6082	47.26	40.52	86	56-120
Toluene	<1.257	47.26	41.92	89	59-120
1,2-Dibromoethane	<0.5777	47.26	42.96	91	55-120
Ethylbenzene	<1.156	47.26	45.58	96	53-123
m,p-Xylenes	<0.5930	94.52	86.77	92	52-125
o-Xylene	<1.083	47.26	43.61	92	52-123

Surrogate	%REC	Limits
Dibromofluoromethane	114	71-126
1,2-Dichloroethane-d4	135 *	74-130
Toluene-d8	96	80-120
Bromofluorobenzene	97	76-131

Type: MSD
Lab ID: QC601477
Diln Fac: 0.9579

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	239.5	199.9	83	45-131	14	44
MTBE	47.89	35.58	74	52-120	13	37
Isopropyl Ether (DIPE)	47.89	28.57	60	53-120	10	39
Ethyl tert-Butyl Ether (ETBE)	47.89	36.52	76	53-120	9	39
1,2-Dichloroethane	47.89	48.31	101	58-122	11	37
Benzene	47.89	38.65	81	62-123	14	40
Methyl tert-Amyl Ether (TAME)	47.89	36.43	76	56-120	12	39
Toluene	47.89	38.89	81	59-120	9	43
1,2-Dibromoethane	47.89	40.07	84	55-120	8	37
Ethylbenzene	47.89	41.46	87	53-123	11	43
m,p-Xylenes	95.79	79.97	83	52-125	9	45
o-Xylene	47.89	40.26	84	52-123	9	41

Surrogate	%REC	Limits
Dibromofluoromethane	111	71-126
1,2-Dichloroethane-d4	130	74-130
Toluene-d8	98	80-120
Bromofluorobenzene	100	76-131

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC601616	Batch#:	177158
Matrix:	Soil	Analyzed:	07/26/11
Units:	ug/Kg		

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	88.31	71	44-138
MTBE	25.00	19.01	76	59-120
Isopropyl Ether (DIPE)	25.00	18.41	74	54-130
Ethyl tert-Butyl Ether (ETBE)	25.00	19.20	77	58-124
1,2-Dichloroethane	25.00	24.31	97	71-126
Benzene	25.00	26.66	107	80-122
Methyl tert-Amyl Ether (TAME)	25.00	18.92	76	63-120
Toluene	25.00	26.12	104	80-120
1,2-Dibromoethane	25.00	21.59	86	78-120
Ethylbenzene	25.00	27.28	109	80-122
m,p-Xylenes	50.00	54.82	110	79-126
o-Xylene	25.00	24.43	98	79-122

Surrogate	%REC	Limits
Dibromofluoromethane	102	71-126
1,2-Dichloroethane-d4	102	74-130
Toluene-d8	104	80-120
Bromofluorobenzene	97	76-131

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC601617	Batch#:	177158
Matrix:	Soil	Analyzed:	07/26/11
Units:	ug/Kg		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	100
MTBE	ND	5.0
Isopropyl Ether (DIPE)	ND	5.0
Ethyl tert-Butyl Ether (ETBE)	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Methyl tert-Amyl Ether (TAME)	ND	5.0
Ethanol	ND	1,000
Toluene	ND	5.0
1,2-Dibromoethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	95	71-126
1,2-Dichloroethane-d4	100	74-130
Toluene-d8	103	80-120
Bromofluorobenzene	93	76-131

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	DP-2@24FT	Batch#:	177158
MSS Lab ID:	229640-010	Sampled:	07/20/11
Matrix:	Soil	Received:	07/22/11
Units:	ug/Kg	Analyzed:	07/26/11
Basis:	as received		

Type: MS Diln Fac: 0.9191
Lab ID: QC601727

Analyte	MSS Result	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	<17.69	229.8	80.14	35 *	45-131
MTBE	<0.9912	45.96	22.66	49 *	52-120
Isopropyl Ether (DIPE)	<1.435	45.96	23.86	52 *	53-120
Ethyl tert-Butyl Ether (ETBE)	<0.5698	45.96	26.36	57	53-120
1,2-Dichloroethane	<0.6944	45.96	29.62	64	58-122
Benzene	<0.6819	45.96	36.03	78	62-123
Methyl tert-Amyl Ether (TAME)	<0.5717	45.96	25.54	56	56-120
Toluene	<0.4589	45.96	34.95	76	59-120
1,2-Dibromoethane	<0.4867	45.96	31.63	69	55-120
Ethylbenzene	<0.6038	45.96	36.69	80	53-123
m,p-Xylenes	<1.302	91.91	71.89	78	52-125
o-Xylene	<0.6711	45.96	34.86	76	52-123

Surrogate	%REC	Limits
Dibromofluoromethane	93	71-126
1,2-Dichloroethane-d4	97	74-130
Toluene-d8	98	80-120
Bromofluorobenzene	94	76-131

Type: MSD Diln Fac: 0.9766
Lab ID: QC601728

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	244.1	121.2	50	45-131	35	44
MTBE	48.83	28.98	59	52-120	18	37
Isopropyl Ether (DIPE)	48.83	29.01	59	53-120	13	39
Ethyl tert-Butyl Ether (ETBE)	48.83	32.13	66	53-120	14	39
1,2-Dichloroethane	48.83	33.90	69	58-122	7	37
Benzene	48.83	37.74	77	62-123	1	40
Methyl tert-Amyl Ether (TAME)	48.83	31.96	65	56-120	16	39
Toluene	48.83	37.04	76	59-120	0	43
1,2-Dibromoethane	48.83	35.32	72	55-120	5	37
Ethylbenzene	48.83	38.50	79	53-123	1	43
m,p-Xylenes	97.66	73.82	76	52-125	3	45
o-Xylene	48.83	37.68	77	52-123	2	41

Surrogate	%REC	Limits
Dibromofluoromethane	90	71-126
1,2-Dichloroethane-d4	97	74-130
Toluene-d8	97	80-120
Bromofluorobenzene	97	76-131

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC601800	Batch#:	177202
Matrix:	Soil	Analyzed:	07/27/11
Units:	ug/Kg		

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	67.03 b	54	44-138
MTBE	25.00	19.05	76	59-120
Isopropyl Ether (DIPE)	25.00	18.52	74	54-130
Ethyl tert-Butyl Ether (ETBE)	25.00	19.44	78	58-124
1,2-Dichloroethane	25.00	25.65	103	71-126
Benzene	25.00	26.50	106	80-122
Methyl tert-Amyl Ether (TAME)	25.00	18.76	75	63-120
Toluene	25.00	26.36	105	80-120
1,2-Dibromoethane	25.00	21.49	86	78-120
Ethylbenzene	25.00	26.64	107	80-122
m,p-Xylenes	50.00	52.45	105	79-126
o-Xylene	25.00	23.92	96	79-122

Surrogate	%REC	Limits
Dibromofluoromethane	102	71-126
1,2-Dichloroethane-d4	102	74-130
Toluene-d8	103	80-120
Bromofluorobenzene	98	76-131

b= See narrative

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC601801	Batch#:	177202
Matrix:	Soil	Analyzed:	07/27/11
Units:	ug/Kg		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	100
MTBE	ND	5.0
Isopropyl Ether (DIPE)	ND	5.0
Ethyl tert-Butyl Ether (ETBE)	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Methyl tert-Amyl Ether (TAME)	ND	5.0
Ethanol	ND	1,000
Toluene	ND	5.0
1,2-Dibromoethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	99	71-126
1,2-Dichloroethane-d4	99	74-130
Toluene-d8	104	80-120
Bromofluorobenzene	96	76-131

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC601836	Batch#:	177212
Matrix:	Soil	Analyzed:	07/27/11
Units:	ug/Kg		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	100
MTBE	ND	5.0
Isopropyl Ether (DIPE)	ND	5.0
Ethyl tert-Butyl Ether (ETBE)	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Methyl tert-Amyl Ether (TAME)	ND	5.0
Ethanol	ND	1,000
Toluene	ND	5.0
1,2-Dibromoethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	112	71-126
1,2-Dichloroethane-d4	88	74-130
Toluene-d8	97	80-120
Bromofluorobenzene	110	76-131

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC601837	Batch#:	177212
Matrix:	Soil	Analyzed:	07/27/11
Units:	ug/Kg		

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	100.0	71.84 b	72	44-138
MTBE	20.00	15.30	76	59-120
Isopropyl Ether (DIPE)	20.00	14.69	73	54-130
Ethyl tert-Butyl Ether (ETBE)	20.00	16.71	84	58-124
1,2-Dichloroethane	20.00	16.67	83	71-126
Benzene	20.00	17.93	90	80-122
Methyl tert-Amyl Ether (TAME)	20.00	13.91	70	63-120
Toluene	20.00	19.16	96	80-120
1,2-Dibromoethane	20.00	19.68	98	78-120
Ethylbenzene	20.00	19.00	95	80-122
m,p-Xylenes	40.00	40.78	102	79-126
o-Xylene	20.00	20.36	102	79-122

Surrogate	%REC	Limits
Dibromofluoromethane	112	71-126
1,2-Dichloroethane-d4	85	74-130
Toluene-d8	99	80-120
Bromofluorobenzene	96	76-131

b= See narrative

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	DP-5@28FT	Batch#:	177212
MSS Lab ID:	229640-029	Sampled:	07/20/11
Matrix:	Soil	Received:	07/22/11
Units:	ug/Kg	Analyzed:	07/28/11
Basis:	as received		

Type: MS Diln Fac: 0.9328
Lab ID: QC601838

Analyte	MSS Result	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	<14.49	233.2	147.3 b	63	45-131
MTBE	<1.401	46.64	29.13	62	52-120
Isopropyl Ether (DIPE)	<1.195	46.64	25.68	55	53-120
Ethyl tert-Butyl Ether (ETBE)	<0.9007	46.64	29.15	62	53-120
1,2-Dichloroethane	<0.8660	46.64	33.06	71	58-122
Benzene	4.603	46.64	43.93	84	62-123
Methyl tert-Amyl Ether (TAME)	<0.5867	46.64	29.98	64	56-120
Toluene	<1.212	46.64	43.86	94	59-120
1,2-Dibromoethane	<0.5573	46.64	43.10	92	55-120
Ethylbenzene	26.26	46.64	69.17	92	53-123
m,p-Xylenes	98.78	93.28	192.8	101	52-125
o-Xylene	11.13	46.64	55.18	94	52-123

Surrogate	%REC	Limits
Dibromofluoromethane	95	71-126
1,2-Dichloroethane-d4	76	74-130
Toluene-d8	98	80-120
Bromofluorobenzene	93	76-131

Type: MSD Diln Fac: 0.9823
Lab ID: QC601839

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	245.6	165.2 b	67	45-131	6	44
MTBE	49.12	30.99	63	52-120	1	37
Isopropyl Ether (DIPE)	49.12	27.16	55	53-120	0	39
Ethyl tert-Butyl Ether (ETBE)	49.12	32.24	66	53-120	5	39
1,2-Dichloroethane	49.12	34.18	70	58-122	2	37
Benzene	49.12	45.42	83	62-123	1	40
Methyl tert-Amyl Ether (TAME)	49.12	32.80	67	56-120	4	39
Toluene	49.12	44.76	91	59-120	3	43
1,2-Dibromoethane	49.12	46.02	94	55-120	1	37
Ethylbenzene	49.12	66.71	82	53-123	7	43
m,p-Xylenes	98.23	179.2	82	52-125	10	45
o-Xylene	49.12	56.52	92	52-123	2	41

Surrogate	%REC	Limits
Dibromofluoromethane	98	71-126
1,2-Dichloroethane-d4	75	74-130
Toluene-d8	96	80-120
Bromofluorobenzene	93	76-131

b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	DP-2@28FT	Batch#:	177202
MSS Lab ID:	229640-011	Sampled:	07/20/11
Matrix:	Soil	Received:	07/22/11
Units:	ug/Kg	Analyzed:	07/27/11
Basis:	as received		

Type: MS Diln Fac: 0.9634
Lab ID: QC601852

Analyte	MSS Result	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	<17.09	240.8	122.2 b	51	45-131
MTBE	<0.9573	48.17	33.80	70	52-120
Isopropyl Ether (DIPE)	<1.386	48.17	32.88	68	53-120
Ethyl tert-Butyl Ether (ETBE)	<0.5504	48.17	35.47	74	53-120
1,2-Dichloroethane	<0.6707	48.17	47.62	99	58-122
Benzene	<0.6586	48.17	50.76	105	62-123
Methyl tert-Amyl Ether (TAME)	<0.5522	48.17	33.79	70	56-120
Toluene	<0.4432	48.17	50.25	104	59-120
1,2-Dibromoethane	<0.4700	48.17	40.64	84	55-120
Ethylbenzene	33.75	48.17	94.59	126 *	53-123
m,p-Xylenes	41.62	96.34	160.0	123	52-125
o-Xylene	<0.6482	48.17	48.49	101	52-123

Surrogate	%REC	Limits
Dibromofluoromethane	103	71-126
1,2-Dichloroethane-d4	105	74-130
Toluene-d8	103	80-120
Bromofluorobenzene	102	76-131

Type: MSD Diln Fac: 0.9747
Lab ID: QC601853

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	243.7	101.3 b	42 *	45-131	20	44
MTBE	48.73	29.81	61	52-120	14	37
Isopropyl Ether (DIPE)	48.73	29.94	61	53-120	11	39
Ethyl tert-Butyl Ether (ETBE)	48.73	31.65	65	53-120	13	39
1,2-Dichloroethane	48.73	40.30	83	58-122	18	37
Benzene	48.73	44.68	92	62-123	14	40
Methyl tert-Amyl Ether (TAME)	48.73	28.81	59	56-120	17	39
Toluene	48.73	45.87	94	59-120	10	43
1,2-Dibromoethane	48.73	36.00	74	55-120	13	37
Ethylbenzene	48.73	86.73	109	53-123	9	43
m,p-Xylenes	97.47	147.7	109	52-125	9	45
o-Xylene	48.73	44.53	91	52-123	10	41

Surrogate	%REC	Limits
Dibromofluoromethane	103	71-126
1,2-Dichloroethane-d4	98	74-130
Toluene-d8	106	80-120
Bromofluorobenzene	97	76-131

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC601942	Batch#:	177237
Matrix:	Soil	Analyzed:	07/28/11
Units:	ug/Kg		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	100
MTBE	ND	5.0
Isopropyl Ether (DIPE)	ND	5.0
Ethyl tert-Butyl Ether (ETBE)	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Methyl tert-Amyl Ether (TAME)	ND	5.0
Ethanol	ND	1,000
Toluene	ND	5.0
1,2-Dibromoethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	107	71-126
1,2-Dichloroethane-d4	88	74-130
Toluene-d8	93	80-120
Bromofluorobenzene	108	76-131

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC601943	Batch#:	177237
Matrix:	Soil	Analyzed:	07/28/11
Units:	ug/Kg		

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	100.0	78.23	78	44-138
MTBE	20.00	16.47	82	59-120
Isopropyl Ether (DIPE)	20.00	15.08	75	54-130
Ethyl tert-Butyl Ether (ETBE)	20.00	17.00	85	58-124
1,2-Dichloroethane	20.00	16.79	84	71-126
Benzene	20.00	19.66	98	80-122
Methyl tert-Amyl Ether (TAME)	20.00	15.92	80	63-120
Toluene	20.00	20.25	101	80-120
1,2-Dibromoethane	20.00	20.27	101	78-120
Ethylbenzene	20.00	20.06	100	80-122
m,p-Xylenes	40.00	43.19	108	79-126
o-Xylene	20.00	21.92	110	79-122

Surrogate	%REC	Limits
Dibromofluoromethane	107	71-126
1,2-Dichloroethane-d4	80	74-130
Toluene-d8	101	80-120
Bromofluorobenzene	104	76-131

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC601954	Batch#:	177240
Matrix:	Soil	Analyzed:	07/28/11
Units:	ug/Kg		

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	71.26 b	57	44-138
MTBE	25.00	17.31	69	59-120
Isopropyl Ether (DIPE)	25.00	16.40	66	54-130
Ethyl tert-Butyl Ether (ETBE)	25.00	17.33	69	58-124
1,2-Dichloroethane	25.00	22.41	90	71-126
Benzene	25.00	24.64	99	80-122
Methyl tert-Amyl Ether (TAME)	25.00	17.06	68	63-120
Toluene	25.00	24.29	97	80-120
1,2-Dibromoethane	25.00	21.02	84	78-120
Ethylbenzene	25.00	24.17	97	80-122
m,p-Xylenes	50.00	49.43	99	79-126
o-Xylene	25.00	23.62	94	79-122

Surrogate	%REC	Limits
Dibromofluoromethane	96	71-126
1,2-Dichloroethane-d4	87	74-130
Toluene-d8	98	80-120
Bromofluorobenzene	96	76-131

b= See narrative

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC601955	Batch#:	177240
Matrix:	Soil	Analyzed:	07/28/11
Units:	ug/Kg		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	100
MTBE	ND	5.0
Isopropyl Ether (DIPE)	ND	5.0
Ethyl tert-Butyl Ether (ETBE)	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Methyl tert-Amyl Ether (TAME)	ND	5.0
Ethanol	ND	1,000
Toluene	ND	5.0
1,2-Dibromoethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	95	71-126
1,2-Dichloroethane-d4	83	74-130
Toluene-d8	98	80-120
Bromofluorobenzene	93	76-131

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	DP-5@7.5FT	Batch#:	177240
MSS Lab ID:	229640-025	Sampled:	07/20/11
Matrix:	Soil	Received:	07/22/11
Units:	ug/Kg	Analyzed:	07/28/11
Basis:	as received		

Type: MS Diln Fac: 0.9434
Lab ID: QC602011

Analyte	MSS Result	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	<17.28	235.8	88.71 b	38 *	45-131
MTBE	<0.9683	47.17	24.01	51 *	52-120
Isopropyl Ether (DIPE)	<1.402	47.17	26.25	56	53-120
Ethyl tert-Butyl Ether (ETBE)	<0.5567	47.17	25.88	55	53-120
1,2-Dichloroethane	<0.6785	47.17	30.63	65	58-122
Benzene	<0.6662	47.17	40.56	86	62-123
Methyl tert-Amyl Ether (TAME)	<0.5585	47.17	26.17	55 *	56-120
Toluene	<0.4483	47.17	37.33	79	59-120
1,2-Dibromoethane	<0.4754	47.17	27.65	59	55-120
Ethylbenzene	<0.5899	47.17	38.40	81	53-123
m,p-Xylenes	<1.272	94.34	76.45	81	52-125
o-Xylene	<0.6556	47.17	34.87	74	52-123

Surrogate	%REC	Limits
Dibromofluoromethane	102	71-126
1,2-Dichloroethane-d4	90	74-130
Toluene-d8	100	80-120
Bromofluorobenzene	90	76-131

Type: MSD Diln Fac: 0.9542
Lab ID: QC602012

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	238.5	87.71 b	37 *	45-131	2	44
MTBE	47.71	23.79	50 *	52-120	2	37
Isopropyl Ether (DIPE)	47.71	24.96	52 *	53-120	6	39
Ethyl tert-Butyl Ether (ETBE)	47.71	25.27	53	53-120	4	39
1,2-Dichloroethane	47.71	30.76	64	58-122	1	37
Benzene	47.71	38.42	81	62-123	7	40
Methyl tert-Amyl Ether (TAME)	47.71	24.40	51 *	56-120	8	39
Toluene	47.71	34.30	72	59-120	10	43
1,2-Dibromoethane	47.71	25.41	53 *	55-120	10	37
Ethylbenzene	47.71	34.72	73	53-123	11	43
m,p-Xylenes	95.42	69.90	73	52-125	10	45
o-Xylene	47.71	32.46	68	52-123	8	41

Surrogate	%REC	Limits
Dibromofluoromethane	101	71-126
1,2-Dichloroethane-d4	90	74-130
Toluene-d8	97	80-120
Bromofluorobenzene	96	76-131

*= Value outside of QC limits; see narrative
b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC602297	Batch#:	177322
Matrix:	Soil	Analyzed:	07/31/11
Units:	ug/Kg		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	100
MTBE	ND	5.0
Isopropyl Ether (DIPE)	ND	5.0
Ethyl tert-Butyl Ether (ETBE)	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Methyl tert-Amyl Ether (TAME)	ND	5.0
Ethanol	ND	1,000
Toluene	ND	5.0
1,2-Dibromoethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	109	71-126
1,2-Dichloroethane-d4	79	74-130
Toluene-d8	95	80-120
Bromofluorobenzene	107	76-131

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Matrix:	Soil	Batch#:	177322
Units:	ug/Kg	Analyzed:	07/31/11
Diln Fac:	1.000		

Type: BS Lab ID: QC602298

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	100.0	72.08 b	72	44-138
MTBE	20.00	14.85	74	59-120
Isopropyl Ether (DIPE)	20.00	14.57	73	54-130
Ethyl tert-Butyl Ether (ETBE)	20.00	16.34	82	58-124
1,2-Dichloroethane	20.00	14.68 b	73	71-126
Benzene	20.00	16.84	84	80-122
Methyl tert-Amyl Ether (TAME)	20.00	13.67	68	63-120
Toluene	20.00	17.23	86	80-120
1,2-Dibromoethane	20.00	17.91	90	78-120
Ethylbenzene	20.00	17.06	85	80-122
m,p-Xylenes	40.00	37.22	93	79-126
o-Xylene	20.00	18.45	92	79-122

Surrogate	%REC	Limits
Dibromofluoromethane	112	71-126
1,2-Dichloroethane-d4	76	74-130
Toluene-d8	95	80-120
Bromofluorobenzene	102	76-131

Type: BSD Lab ID: QC602299

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	100.0	78.53 b	79	44-138	9	42
MTBE	20.00	15.99	80	59-120	7	26
Isopropyl Ether (DIPE)	20.00	14.53	73	54-130	0	22
Ethyl tert-Butyl Ether (ETBE)	20.00	16.83	84	58-124	3	20
1,2-Dichloroethane	20.00	15.70 b	79	71-126	7	20
Benzene	20.00	17.41	87	80-122	3	20
Methyl tert-Amyl Ether (TAME)	20.00	15.48	77	63-120	12	20
Toluene	20.00	18.93	95	80-120	9	21
1,2-Dibromoethane	20.00	19.27	96	78-120	7	20
Ethylbenzene	20.00	17.71	89	80-122	4	21
m,p-Xylenes	40.00	40.06	100	79-126	7	22
o-Xylene	20.00	19.41	97	79-122	5	21

Surrogate	%REC	Limits
Dibromofluoromethane	111	71-126
1,2-Dichloroethane-d4	79	74-130
Toluene-d8	96	80-120
Bromofluorobenzene	104	76-131

b= See narrative
RPD= Relative Percent Difference

76.0

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC602720	Batch#:	177432
Matrix:	Soil	Analyzed:	08/03/11
Units:	ug/Kg		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	100
MTBE	ND	5.0
Isopropyl Ether (DIPE)	ND	5.0
Ethyl tert-Butyl Ether (ETBE)	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Methyl tert-Amyl Ether (TAME)	ND	5.0
Ethanol	ND	1,000
Toluene	ND	5.0
1,2-Dibromoethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	105	71-126
1,2-Dichloroethane-d4	78	74-130
Toluene-d8	94	80-120
Bromofluorobenzene	100	76-131

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Matrix:	Soil	Batch#:	177432
Units:	ug/Kg	Analyzed:	08/03/11
Diln Fac:	1.000		

Type: BS Lab ID: QC602721

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	100.0	79.81	80	44-138
MTBE	20.00	14.24	71	59-120
Isopropyl Ether (DIPE)	20.00	12.84	64	54-130
Ethyl tert-Butyl Ether (ETBE)	20.00	14.58	73	58-124
1,2-Dichloroethane	20.00	15.78	79	71-126
Benzene	20.00	17.04	85	80-122
Methyl tert-Amyl Ether (TAME)	20.00	13.42	67	63-120
Toluene	20.00	17.71	89	80-120
1,2-Dibromoethane	20.00	18.81	94	78-120
Ethylbenzene	20.00	17.57	88	80-122
m,p-Xylenes	40.00	37.37	93	79-126
o-Xylene	20.00	18.01	90	79-122

Surrogate	%REC	Limits
Dibromofluoromethane	106	71-126
1,2-Dichloroethane-d4	77	74-130
Toluene-d8	95	80-120
Bromofluorobenzene	103	76-131

Type: BSD Lab ID: QC602722

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	100.0	74.30	74	44-138	7	42
MTBE	20.00	14.73	74	59-120	3	26
Isopropyl Ether (DIPE)	20.00	12.49	62	54-130	3	22
Ethyl tert-Butyl Ether (ETBE)	20.00	14.81	74	58-124	2	20
1,2-Dichloroethane	20.00	15.62	78	71-126	1	20
Benzene	20.00	16.74	84	80-122	2	20
Methyl tert-Amyl Ether (TAME)	20.00	13.36	67	63-120	1	20
Toluene	20.00	18.33	92	80-120	3	21
1,2-Dibromoethane	20.00	20.60	103	78-120	9	20
Ethylbenzene	20.00	17.45	87	80-122	1	21
m,p-Xylenes	40.00	39.94	100	79-126	7	22
o-Xylene	20.00	19.25	96	79-122	7	21

Surrogate	%REC	Limits
Dibromofluoromethane	107	71-126
1,2-Dichloroethane-d4	77	74-130
Toluene-d8	96	80-120
Bromofluorobenzene	103	76-131

RPD= Relative Percent Difference

81.0

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	229640	Location:	15101 Freedom Avenue
Client:	SOMA Environmental Engineering Inc.	Prep:	EPA 5030B
Project#:	2552	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	177432
MSS Lab ID:	229929-003	Sampled:	08/01/11
Matrix:	Soil	Received:	08/02/11
Units:	ug/Kg	Analyzed:	08/03/11
Basis:	as received		

Type: MS Diln Fac: 0.9960
Lab ID: QC602802

Analyte	MSS Result	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	<15.56	249.0	198.7	80	45-131
MTBE	<1.504	49.80	33.22	67	52-120
Isopropyl Ether (DIPE)	<1.283	49.80	27.12	54	53-120
Ethyl tert-Butyl Ether (ETBE)	<0.9673	49.80	32.06	64	53-120
1,2-Dichloroethane	<0.9300	49.80	32.62	66	58-122
Benzene	<0.9649	49.80	35.68	72	62-123
Methyl tert-Amyl Ether (TAME)	<0.6300	49.80	33.79	68	56-120
Toluene	<1.302	49.80	37.00	74	59-120
1,2-Dibromoethane	<0.5985	49.80	40.43	81	55-120
Ethylbenzene	1.721	49.80	33.85	65	53-123
m,p-Xylenes	1.815	99.60	71.85	70	52-125
o-Xylene	<1.122	49.80	35.27	71	52-123

Surrogate	%REC	Limits
Dibromofluoromethane	78	71-126
1,2-Dichloroethane-d4	76	74-130
Toluene-d8	91	80-120
Bromofluorobenzene	97	76-131

Type: MSD Diln Fac: 0.9785
Lab ID: QC602803

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	244.6	176.8	72	45-131	10	44
MTBE	48.92	31.65	65	52-120	3	37
Isopropyl Ether (DIPE)	48.92	26.87	55	53-120	1	39
Ethyl tert-Butyl Ether (ETBE)	48.92	32.19	66	53-120	2	39
1,2-Dichloroethane	48.92	34.43	70	58-122	7	37
Benzene	48.92	38.95	80	62-123	11	40
Methyl tert-Amyl Ether (TAME)	48.92	33.53	69	56-120	1	39
Toluene	48.92	37.85	77	59-120	4	43
1,2-Dibromoethane	48.92	41.70	85	55-120	5	37
Ethylbenzene	48.92	37.29	73	53-123	11	43
m,p-Xylenes	97.85	79.71	80	52-125	12	45
o-Xylene	48.92	38.24	78	52-123	10	41

Surrogate	%REC	Limits
Dibromofluoromethane	80	71-126
1,2-Dichloroethane-d4	76	74-130
Toluene-d8	95	80-120
Bromofluorobenzene	93	76-131

RPD= Relative Percent Difference

82.0