

CAMBRIA

December 3, 2002

Ms. Eva Chu
Alameda County Department of Environmental Health
1131 Harbor Bay Parkway, 2nd Floor
Alameda, California 94502

Re: **Temporary Well Installation Work Plan**
1350 Powell Street
Emeryville, California



Dear Ms. Chu:

On behalf of the Balaam Brothers Partnership, Cambria Environmental Technology, Inc. (Cambria) is pleased to provide this *Temporary Well Installation Work Plan* (Work Plan) for the above-referenced site (Site). This Work Plan was requested by the Alameda County Department of Environmental Health (DEH) to assess groundwater conditions after completion of excavation activities specified in Cambria's approved *Corrective Action Plan* dated July 3, 2002. Described below are the site background, proposed temporary well installation activities, and the proposed schedule.

SITE BACKGROUND

The site is located near the northeast corner of the intersection of Powell Street and Hollis Street in Emeryville, California. The Site background was described in Cambria's Corrective Action Plan. In summary, the Site has been impacted by petroleum hydrocarbons from two former underground storage tanks (USTs) and four former aboveground storage tanks (ASTs). The USTs were removed in 1987.

Excavation of hydrocarbon-impacted soil began in July 2002 and was completed in November 2002. Prior to excavation, the extent of chemicals of concern in Site soil and groundwater had been significantly characterized by 28 borings and 6 test pits. Temporary groundwater monitoring and piezometric wells were installed by R.T. Hicks in September 2001. In July 2002, Cambria sampled groundwater from accessible temporary wells installed by Hicks. The primary chemicals of concern (COCs) at the Site are petroleum hydrocarbons: total petroleum hydrocarbons (TPH) as gasoline (TPHg), TPH as diesel (TPHd), and TPH as motor oil (TPHmo); and benzene, toluene, ethylbenzene, and xylenes (BTEX). Napthalene is also COC.

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Sonoma, CA

**Cambria
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C A M B R I A

Site excavation involved the removal of approximately 15,000 tons of impacted soil. The extent and depth of excavation activities and excavation sampling results are presented in Attachment A. Most of the Site was excavated to approximately 10 feet below grade (fbg), with some excavation extending to 13 fbg to target impacted soil based on field observations. Analytical results from confirmation sampling indicate that Cambria excavated all Site soil exceeding the cleanup level of 1,000 mg/kg combined total petroleum hydrocarbons (TPH) to a maximum depth of 10 fbg. The extent of petroleum hydrocarbons in soil and groundwater is summarized in information in Attachment A.



Soil beyond the excavation of impacted soil was regraded into the deeper excavation areas and replaced with imported fill. All Site soil at 3 fbg or shallower has been replaced with clean imported fill, except soil beneath the small existing building at the southwest corner that will be replaced upon future building demolition.

Groundwater was not encountered during the excavation activities, except for a limited volume (approximately 2,000 gallons) of presumably perched groundwater. The groundwater was encountered south of the former UST (near boring EB-12), north of the dock (near EB-10), and the northern edge of the excavation (near boring 1). The encountered water was offhauled with the exported soil.

The Site subsurface predominantly consists of clean, imported fill underlain by native material. The clean, imported fill placed in the excavation up to approximately 5 fbg has a very high clay content. The native material consists of clay with some interbedded silt and sand. Historic site information suggests that the perched water zone has been excavated, and that groundwater is likely present at approximately 15 to 20 fbg.

Lowney Associates is preparing a groundwater sampling plan for the adjacent 1300 Powell Street site. A detailed description of the background and previous environmental reports for both 1300 and 1350 Powell Street sites is presented in the *Soil and Ground Water Quality Evaluation* dated May 22, 2002, by Lowney Associates of Oakland, California. Cambria understands that the previous environmental reports referenced in the May 22, 2002 report and that report itself have been submitted and reviewed by the DEH.

TEMPORARY WELL INSTALLATION ACTIVITIES

To assess groundwater quality after the significant excavation activities, Cambria proposes the installation of eight temporary monitoring wells at the Site.

Proposed Temporary Well Locations: The eight proposed well locations are presented in Figure 1. The proposed well locations target the primary areas of concern from prior Site groundwater sampling, and provide lateral assessment of the Site. Proposed temporary well TW-1 is located near the former USTs. Four temporary wells are located near former borings that encountered free product and/or sheen: TW-2 is south of the former USTs and near boring EB-12; TW-4 is west of the former USTs and near former temporary 'well' 4A/B/C; TW-6 is south of the former ASTs/piping and near boring EB-9; and TW-7 is north of the dock near boring EB-10. Temporary well TW-3, TW-5 and TW-8 will provide lateral assessment of groundwater quality at the Site.

Permits: Well installation permits will be obtained from the Alameda County Public Works Agency.

Boring Clearance: Cambria will mark the Site boundary and contact Underground Service Alert prior to drilling.

Site Health and Safety Plan: A comprehensive site health and safety plan will be prepared for well installation activities. The plan will be kept onsite during field activities and signed by each site worker.

Drilling Methods: The temporary wells will be installed using direct-push Geoprobe rig. The soil borings will be advanced to approximately 20 fbg. Soil beneath the excavation limit will be logged continuously. Cambria will carefully monitor for the depth of first encountered groundwater, and for static groundwater depth. Soil samples will not be collected for laboratory analysis.

Temporary Well Installation: The eight borings will be converted into 3/4-inch diameter temporary monitoring wells. The temporary wells will be screened into a minimum of approximately 5 feet of groundwater. Cambria anticipates encountering static groundwater between 15 and 20 fbg, and installing 10 feet of PVC well screen. The actual well depth and screen interval will be based on field conditions. The wells will be either pre-packed Geoprobe wells or constructed with 0.010-inch machined slot screen and #2/12 sand in the field. A bentonite seal and grout to surface will be provided.



Water Development and Sampling: Following the installation, the new wells will be developed by surging, swabbing, and purging with a bailer or pump. After well development, groundwater samples will be collected using bailers, a pump or a tube and check valve.

Chemical Analyses: Groundwater samples from each temporary well will be analyzed for:

- Total petroleum hydrocarbons as gasoline (TPHg) and benzene, toluene, ethylbenzene, xylenes (BTEX) by EPA Method 8015/8020;
- TPH as diesel (TPHd) and TPH as motor oil (TPHmo) by modified EPA Method 8015 with silica gel cleanup; and
- Polynuclear aromatic hydrocarbons (PNAs) by EPA Method 8270.

To facilitate calculation of total TPH without overlapping carbon ranges, the samples will also be analyzed for TPH as bunker oil with silica gel cleanup by EPA Method 8015. The total TPH concentration will be considered the sum of TPHg (C6-C9) and TPHbo (C10+).

Well Abandonment: The eight temporary wells will be abandoned approximately one week after installation. The well abandonment procedures will include removal of all well materials and backfilling with bentonite-cement grout to the surface.

SCHEDULE

Cambria plans to commence temporary well installation tomorrow, December 4, 2002. This fast schedule is required to complete well installation and sampling before the anticipated rain this Friday, December 6, 2002. The fast schedule will also facilitate report submittal and review before the holiday season. The Balaam Brothers respectfully request that the DEH expedite report review and issuance of a No Further Remedial Action letter by December 31, 2002.



CLOSING

If you have any questions concerning this report, please feel free to call me at (510) 420-3303.

Sincerely,

Cambria Environmental Technology, Inc.

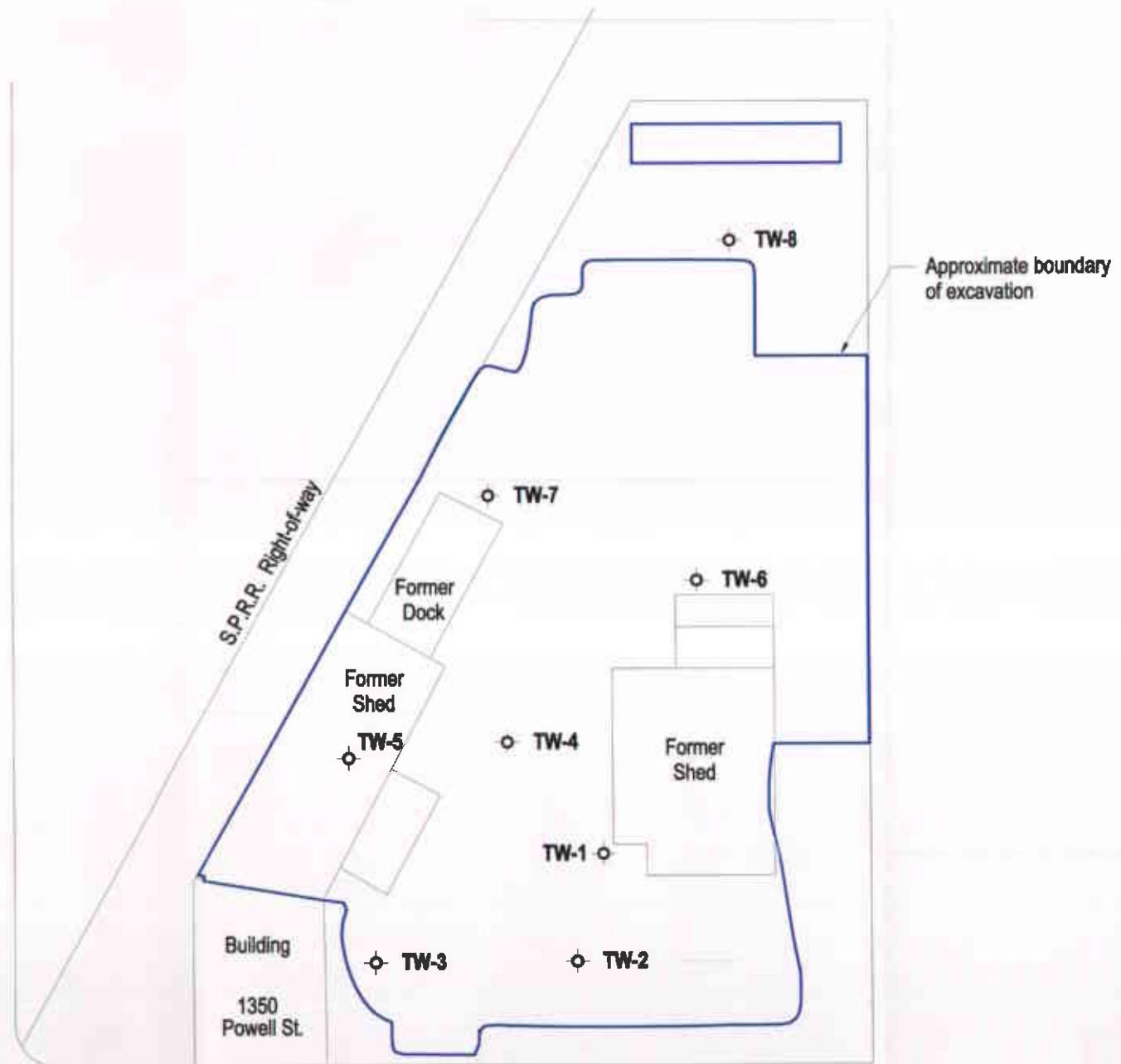
Bob Clark-Riddell, P.E.
Principal Engineer

Attachments: A – Historical Soil and Groundwater Information; Excavation Figures/
Tables

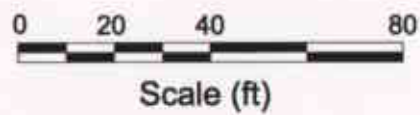
H:\Balaam Brothers (Airgas)\Well Installation\Temp Well Workplan.doc

EXPLANATION

- ◊ TW-1 Proposed temporary well* location
 - Pre-packed Geoprobe well screen, to be screened from approximately 10 to 20 feet below grade



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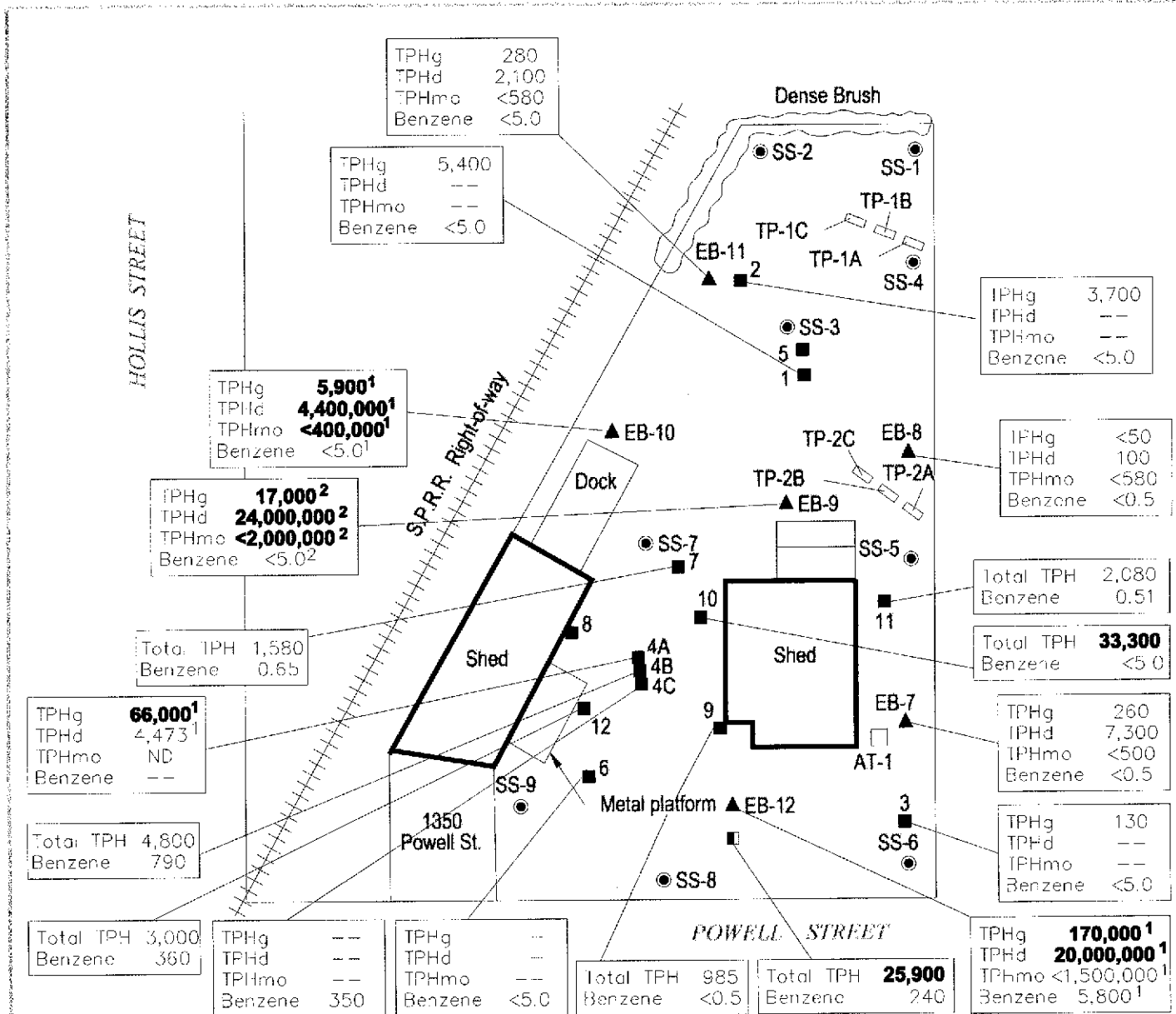


POWELL STREET

FIGURE

1





EXPLANATION

- - Approximate location of excavation grab sample (Cambria 8/2/02)
 - EB-11 ▲ - Approximate location of exploratory ground water boring (Lowney 3/5/02)
 - SS-9 ● - Approximate location of exploratory soil boring (Lowney)
 - 12 ■ - Approximate location of exploratory boring (R.T. Hicks, 8/01 & 9/01; Cambria 7/24/02)
 - TP-1A □ - Approximate location of exploratory test pit (Lowney)
 - NA - Not Analyzed
 - - Not detected at or above the stated laboratory limit
- Concentrations in parts per billion (ppb)
 Concentrations exceeding cleanup goal of <20,000 ppb total TPH is shown in BOLD
- 1 Free product observed on groundwater
 2 Fuel sheen observed on groundwater

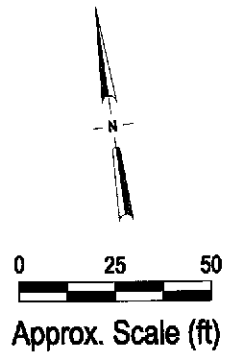


FIGURE
4

H:\BALAAM\FIGURES\GWD\DC\DWG

Base by Lowney Associates dated 5/02.

Balaam Property
 1350 Powell Street
 Emeryville, California



C A M B R I A

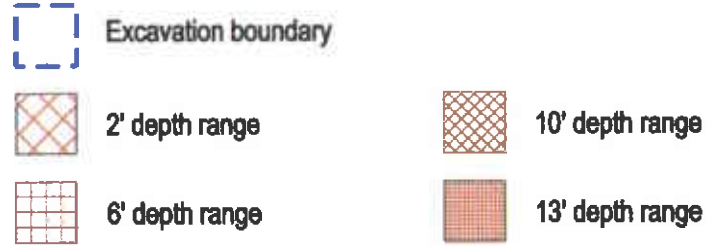
TPHg, TPHd, TPHmo, and Benzene in Ground Water

EXPLANATION

| Depth | TPHg | TPHd | TPHmo | Total* |
|-------|------|------|-------|--------|
|-------|------|------|-------|--------|

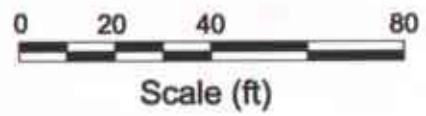
Concentrations in soil are in parts per million (ppm)
 Concentrations exceeding 1,000 ppm total TPH are shown in **bold**

- - Approximate location of excavation sidewall sample (Cambria, 2002)
- - Approximate location of excavation bottom sample (Cambria, 2002)
- - Approximate location of deeper soil boring (Lowney Associates, 2002)
- - Approximate location of shallow soil boring (Lowney Associates, 2002)
- - Approximate location of exploratory boring (R.T. Hicks, 2001)



* - Total TPH does not equal cumulative result of TPHg + TPHd + TPHmo. To avoid quantification of overlapping results, Total TPH = TPHg (C6-C9) + TPHbo (C10+) for soil and sidewall samples during excavation in 2002 (TPHbo = TPH bunker oil). Concentrations below detection limits are added as 1/2 the detection limit.

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POWELL STREET

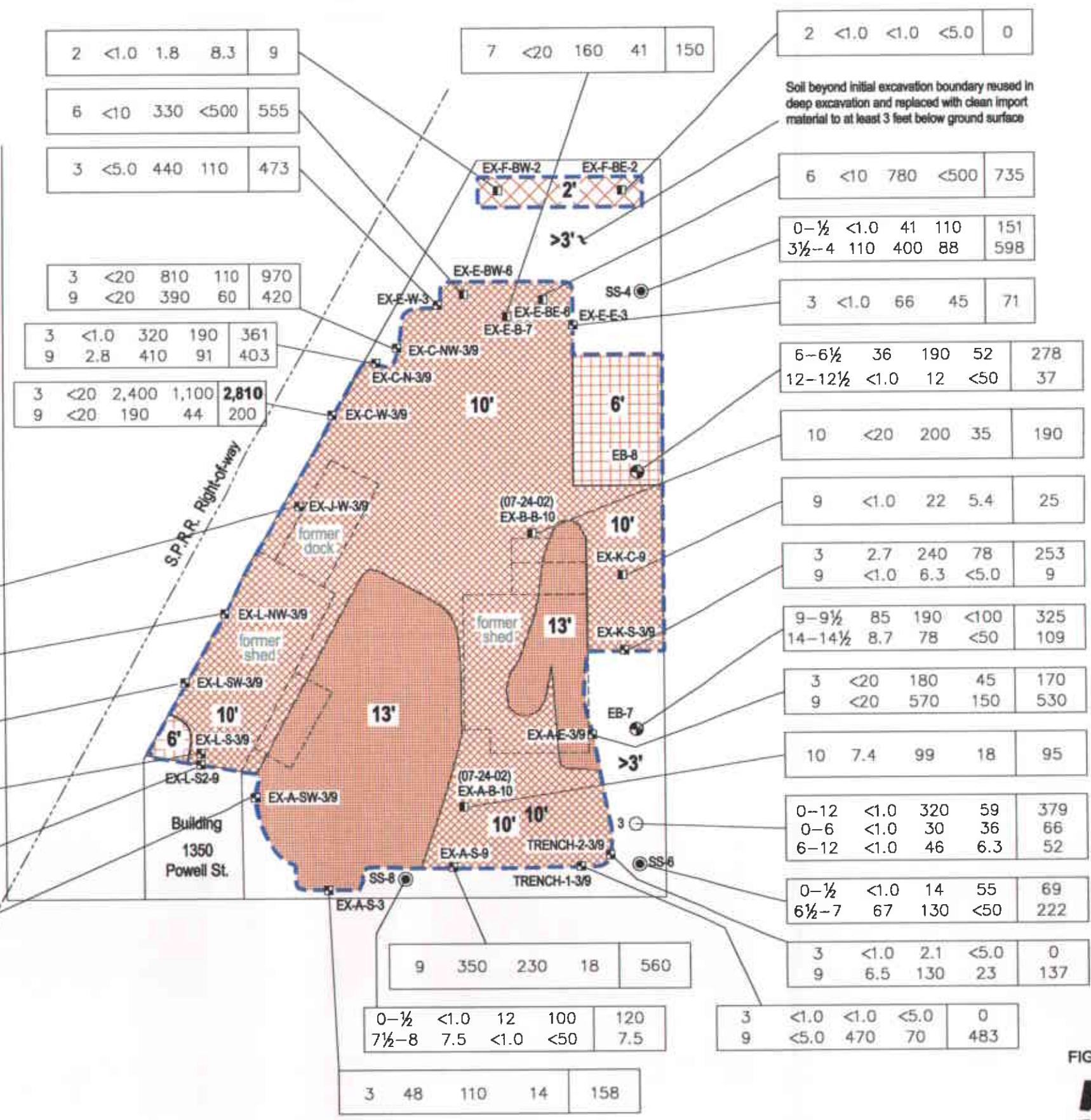


FIGURE 5



EXPLANATION

| Depth | TPHg | TPHd | TPHmo | Total* |
|-------|------|------|-------|--------|
|-------|------|------|-------|--------|

- - Approximate location of sidewall sample (Cambria, 2002)
- - Approximate location of soil sample (Cambria, 2002)
- - Approximate location of deeper soil boring (Lowney Associates, 2002)
- - Approximate location of shallow soil boring (Lowney Associates, 2002)
- - Approximate location of exploratory boring (R.T. Hicks, 2001)
- ▨ - Approximate location of exploratory test pit (Lowney Associates, 2002)

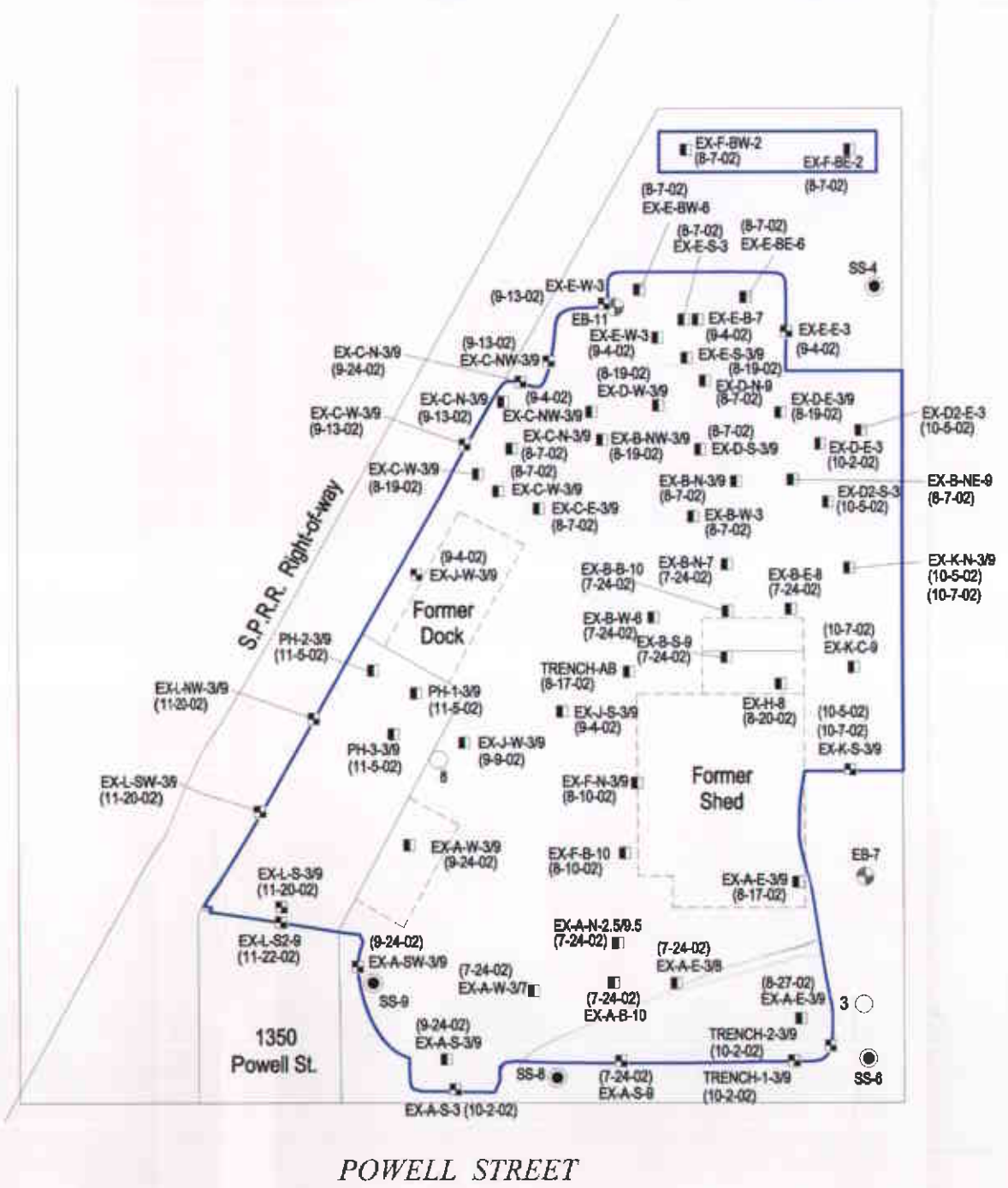
-- - Not Analyzed

ND - Not detected at or above laboratory reporting limit

Concentrations in parts per million (ppm)

Concentrations exceeding 1,000 ppm total TPH are shown in **bold**

* - Total TPH does not equal cumulative result of TPHg + TPHd + TPHmo. To avoid quantification of overlapping results, Total TPH = TPHg (C6-C9) + TPHbo (C10+) for soil and sidewall samples during excavation in 2002 (TPHbo = TPH bunker oil). Concentrations below detection limits are added as 1/2 the detection limit.



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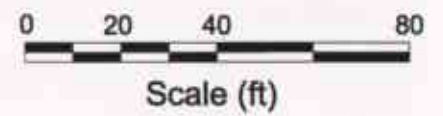


FIGURE
6

\\BALAAM\BROTHERS\FIGURES\CAMBRIA\BOL\SAMPLES_13-3.DWG

CAMBRIA

Table 1a. Soil Sampling Analytical Data - Hydrocarbon Analyses
Balaam Airgas
 1350 Powell Street, Emeryville, California

| Sample ID | Depth - feet bgs | Date Sampled | TPHg | TPHd | TPHmo | TPHbo | Total | Benzene | Toluene | Ethylbenzene | Xylenes | MTBE |
|--|---------------------|--------------|---------|-----------|---------|---------|-------|---------|---------|--------------|---------|--------|
| | | | (C6-C9) | (C10-C23) | (C-18+) | (C-10+) | TPH | | | | | |
| EPA Method: | | | 8015m | 8015 | 8015 | 8015 | | 8021 | 8021 | 8021 | 8021 | 8021 |
| Residential RBSL*: | | | 400 | 500 | 500 | NE | NE | 0.18 | 8.4 | 24 | 1.0 | 1.0 |
| Hicks Borings, 2001 | | | | | | | | | | | | |
| Borehole #1 | Composite 0'-2.5' | 8/7/01 | ND | 78 | 99 | -- | -- | ND | ND | ND | ND | ND |
| Borehole #1 | Composite 4'-12' | 8/7/01 | 750 | 1400 | 55 | -- | -- | ND | ND | ND | ND | ND |
| Borehole #2 | Composite 0'-6' | 8/7/01 | 45 | 2200 | 200 | -- | -- | ND | ND | ND | ND | ND |
| Borehole #2 | Composite 6'-12' | 8/7/01 | 8.3 | 500 | 29 | -- | -- | ND | ND | ND | ND | ND |
| Borehole #3 | Composite 0'-6' | 8/7/01 | ND | 30 | 36 | -- | -- | ND | ND | ND | ND | ND |
| Borehole #3 | Composite 6'-12' | 8/7/01 | ND | 46 | 6.3 | -- | -- | ND | ND | ND | ND | ND |
| Borehole #4 | Composite 0'-6' | 8/7/01 | 230 | 1600 | ND | -- | -- | ND | ND | 0.32 | 0.97 | ND |
| Borehole #4 | Composite 6'-12' | 8/7/01 | 250 | 1600 | ND | -- | -- | ND | ND | 0.14 | ND | ND |
| Borehole #5 | Composite 0'-6' | 8/7/01 | 67 | 4300 | 220 | -- | -- | ND | ND | ND | ND | ND |
| Borehole #5 | Composite 6'-12' | 8/7/01 | 17 | 2400 | 110 | -- | -- | ND | ND | ND | ND | ND |
| Borehole #6 | Composite 11.5'-13' | 9/27/01 | -- | ND | -- | -- | -- | ND | ND | ND | ND | ND |
| Borehole #6 | Composite 12'-16' | 9/27/01 | -- | 21 | -- | -- | -- | ND | ND | ND | ND | ND |
| Borehole #6 | Composite 4'-10' | 9/27/01 | -- | 970 | -- | -- | -- | ND | ND | ND | ND | ND |
| Borehole #8 | Composite 0'-5' | 9/27/01 | -- | 13 | -- | -- | -- | ND | ND | ND | ND | ND |
| Borehole #8 | Composite 5.25'-7' | 9/27/01 | -- | 2800 | -- | -- | -- | ND | ND | ND | ND | ND |
| Borehole #9 | Composite 7'-13' | 9/27/01 | -- | 210 | -- | -- | -- | ND | ND | ND | ND | ND |
| Borehole #10 | Composite 0'-10' | 9/27/01 | -- | 170 | -- | -- | -- | ND | ND | ND | ND | ND |
| Borehole #12 | Composite 9'-10' | 9/27/01 | -- | 16 | -- | -- | -- | ND | ND | ND | ND | ND |
| Lowney Associates Borings, 2002 | | | | | | | | | | | | |
| SS-1 (fill) | 0'-0.5' | 3/6/01 | <1.0 | 2,400 | 3,100 | -- | -- | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 |
| SS-1 (native) | 3.5'-4' | 3/6/01 | 110 | 94 | <50 | -- | -- | <0.62 | <0.62 | <0.62 | <0.62 | <0.62 |
| SS-2 (fill) | 0'-0.5' | 3/6/01 | <1.0 | 100 | 960 | -- | -- | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 |
| SS-2 (native) | 5'-5.5' | 3/6/01 | 26 | 150 | <50 | -- | -- | <0.62 | <0.62 | <0.62 | <0.62 | <0.62 |
| SS-3 (fill) | 0'-0.5' | 3/6/01 | <1.0 | 34 | <50 | -- | -- | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 |
| SS-3 (native) | 3.5'-4' | 3/6/01 | 210 | 790 | <500 | -- | -- | <6.2 | <6.2 | <6.2 | <6.2 | <6.2 |
| SS-4 (fill) | 0'-0.5' | 3/6/01 | <1.0 | 41 | 110 | -- | -- | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 |
| SS-4 (native) | 3.5'-4' | 3/6/01 | 110 | 400 | 88 | -- | -- | <0.62 | <0.62 | <0.62 | <0.62 | <0.62 |
| SS-5 (fill) | 0'-0.5' | 3/6/01 | <1.0 | 960 | 1,900 | -- | -- | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 |
| SS-5 (native) | 7'-7.5' | 3/6/01 | 210 | 700 | <250 | -- | -- | <0.62 | <0.62 | <0.62 | <0.62 | <0.62 |
| SS-6 (fill) | 0'-0.5' | 3/6/01 | <1.0 | 14 | 55 | -- | -- | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 |
| SS-6 (native) | 6.5'-7' | 3/6/01 | 67 | 130 | <50 | -- | -- | <0.62 | <0.62 | <0.62 | <0.62 | <0.62 |
| SS-7 (fill) | 0'-0.5' | 3/6/01 | <1.0 | 4.3 | <50 | -- | -- | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 |
| SS-7 (native) | 6'-6.5' | 3/6/01 | 260 | 440 | <50 | -- | -- | <0.62 | <0.62 | <0.62 | <0.62 | <0.62 |
| SS-8 (fill) | 0'-0.5' | 3/6/01 | <1.0 | 12 | 100 | -- | -- | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 |
| SS-8 (native) | 7.5'-8' | 3/6/01 | 7.5 | <1.0 | <50 | -- | -- | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 |
| SS-9 (fill) | 0'-0.5' | 3/6/01 | <1.0 | 5.4 | 83 | -- | -- | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 |
| SS-9 (native) | 4.5'-5' | 3/6/01 | 110 | 120 | <500 | -- | -- | <0.62 | <0.62 | <0.62 | <0.62 | <0.62 |

CAMBRIA

Table 1a. Soil Sampling Analytical Data - Hydrocarbon Analyses
 Balaam Airgas
 1350 Powell Street, Emeryville, California

| Sample ID | Depth - feet bgs | Date Sampled | TPHg | TPHd | TPHmo | TPHbo | Total | Benzene | Toluene | Ethylbenzene | Xylenes | MTBE |
|---|------------------|--------------|---------|-----------|---------|---------|---------|---------|---------|--------------|---------|---------|
| | | | (C6-C9) | (C10-C23) | (C-18+) | (C-10+) | TPH | | | | | |
| | | | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) |
| EPA Method: | | | 8015m | 8015 | 8015 | 8015 | | 8021 | 8021 | 8021 | 8021 | 8021 |
| Residential RBSL*: | | | 400 | 500 | 500 | NE | NE | 0.18 | 8.4 | 24 | 1.0 | 1.0 |
| <u>Lowney Associates Borings, 2002</u> | | | | | | | | | | | | |
| BB-7 | 9'-9.5' | 3/4/02 | 85 | 190 | <100 | -- | -- | <0.62 | <0.62 | <0.62 | <0.62 | <0.62 |
| EB-7 | 14'-14.5' | 3/4/02 | 8.7 | 78 | <50 | -- | -- | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 |
| EB-8 | 6'-6.5' | 3/4/02 | 36 | 190 | 52 | -- | -- | <0.62 | <0.62 | <0.62 | <0.62 | <0.62 |
| EB-8 | 12'-12.5' | 3/4/02 | <1.0 | 12 | <50 | -- | -- | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 |
| EB-9 | 7.5'-8' | 3/5/02 | 260 | 560 | <250 | -- | -- | <0.62 | <0.62 | <0.62 | <0.62 | <0.62 |
| EB-9 | 14'-14.5' | 3/5/02 | 100 | 140 | <100 | -- | -- | <0.62 | <0.62 | <0.62 | <0.62 | <0.62 |
| BB-10 | 6'-6.5' | 3/5/02 | 380 | 1,100 | <500 | -- | -- | <3.1 | <3.1 | <3.1 | <3.1 | <3.1 |
| BB-10 | 9'-9.5' | 3/5/02 | 150 | 350 | <500 | -- | -- | <0.023 | <0.023 | <0.023 | <0.023 | <0.023 |
| BB-11 | 6'-6.5' | 3/5/02 | 160 | 820 | <500 | -- | -- | <0.62 | <0.62 | <0.62 | <0.62 | <0.62 |
| BB-11 | 9'-9.5' | 3/5/02 | 130 | 330 | <250 | -- | -- | <0.62 | <0.62 | <0.62 | 0.92 | <0.62 |
| BB-12 | 6'-6.5' | 3/5/02 | 980 | 110 | <500 | -- | -- | 3.4 | 15 | 9.5 | 43 | <2.5 |
| BB-12 | 8'-8.5' | 3/5/02 | 760 | 890 | <500 | -- | -- | 12 | 5.4 | 7.1 | 5.7 | <3.1 |
| <u>Lowney Associates Test Pits, 2002</u> | | | | | | | | | | | | |
| TP-2B | 1.5' | 3/8/02 | -- | 1,800 | <1000 | -- | -- | -- | -- | -- | -- | -- |
| <u>Sidewall Sampling Event I</u> | | | | | | | | | | | | |
| <u>North Side of Property</u> | | | | | | | | | | | | |
| EX-B-W-6 | 6'-7' | 7/24/02 | <200 | 4,600 | 1,900 | 5,000 | 5,100 | <1 | <1 | <1 | <1 | <10 |
| EX-B-N-7 | 7'-8' | 7/24/02 | <200 | 9,600 | 2,800 | 10,000 | 10,100 | <1 | <1 | <1 | <1 | <10 |
| EX-B-B-8 | 8'-9' | 7/24/02 | <100 | 1,900 | 500 | 1,700 | 1,750 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 |
| EX-B-S-9 | 9'-10' | 7/24/02 | <200 | 12,000 | 2,300 | 11,000 | 11,100 | <1 | <1 | <1 | <1 | <10 |
| EX-B-B-10 | 10'-10.5' | 7/24/02 | <20 | 200 | 35 | 180 | 190 | <0.1 | <0.1 | <0.1 | <0.1 | <1 |
| <u>South Side of Property</u> | | | | | | | | | | | | |
| EX-A-W-3 | 3'-4' | 7/24/02 | 900 | 330 | 25 | 300 | 1,200 | 19 | 89 | 29 | 130 | <10 |
| EX-A-W-7 | 7'-8' | 7/24/02 | 460 | 3,300 | 520 | 3,800 | 4,260 | 21 | 3.6 | 12 | 14 | <10 |
| EX-A-N-2.5 | 2.5'-3.5' | 7/24/02 | 67 | 200 | 13 | 180 | 247 | 2.5 | 0.26 | 0.39 | 0.37 | <0.5 |
| EX-A-N-9.5 | 9.5'-10' | 7/24/02 | 2,100 | 2,700 | <500 | 2,300 | 4,400 | 36 | 24 | 85 | 350 | <10 |
| EX-A-B-10 | 10'-10.5' | 7/24/02 | 7.4 | 99 | 18 | 88 | 95 | 0.47 | 0.027 | 0.038 | 0.13 | <0.2 |
| EX-A-B-3 | 3'-4' | 7/24/02 | 67 | 170 | 28 | 150 | 217 | 1.4 | 0.34 | 0.043 | 0.12 | <0.2 |
| EX-A-B-8 | 8'-9' | 7/24/02 | 240 | 7,100 | 900 | 6,900 | 7,140 | 6.2 | 1.5 | 1.4 | 2.7 | <10 |
| EX-A-S-9 | 9'-10' | 7/24/02 | 350 | 230 | 18 | 210 | 560 | 2.0 | 0.30 | 3.4 | 2.1 | <2.0 |

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Table 1a. Soil Sampling Analytical Data - Hydrocarbon Analyses
 Balaam Airgas
 1350 Powell Street, Emeryville, California

| Sample ID | Depth - feet bgs | Date Sampled | TPHg | TPHd | TPHmo | TPHbo | Total | Benzene | Toluene | Ethylbenzene | Xylenes | MTBE |
|--|------------------|--------------|---------|-----------|---------|---------|---------|---------|---------|--------------|---------|---------|
| | | | (C6-C9) | (C10-C23) | (C-18+) | (C-10+) | TPH | | | | | |
| EPA Method: | | | 8015m | 8015 | 8015 | 8015 | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) |
| Residential RBSL*: | | | 400 | 500 | 500 | NE | NE | 0.18 | 8.4 | 24 | 1.0 | 1.0 |
| Sidewall Sampling Event II | | | | | | | | | | | | |
| North Side of Property | | | | | | | | | | | | |
| EX-B-NE-9 | 9'-10' | 8/7/02 | <5.0 | 340 | 130 | 370 | 373 | -- | -- | -- | -- | -- |
| EX-B-W-9 | 9'-10' | 8/7/02 | <100 | 3,800 | 640 | 3,900 | 3,950 | -- | -- | -- | -- | -- |
| EX-B-N-9 | 9'-10' | 8/7/02 | <100 | 7,100 | 1,300 | 7,100 | 7,150 | -- | -- | -- | -- | -- |
| EX-B-N-3 | 3'-4' | 8/7/02 | <1.0 | 17 | 16 | 24 | 25 | -- | -- | -- | -- | -- |
| EX-C-E-9 | 9'-10' | 8/7/02 | <100 | 3,200 | 820 | 3,200 | 3,250 | -- | -- | -- | -- | -- |
| EX-C-E-3 | 3'-4' | 8/7/02 | 19 | 390 | 100 | 360 | 379 | -- | -- | -- | -- | -- |
| EX-C-N-9 | 9'-10' | 8/7/02 | 16 | 1,600 | <500 | 1,700 | 1,716 | -- | -- | -- | -- | -- |
| EX-C-N-3 | 3'-4' | 8/7/02 | <10 | 510 | 140 | 470 | 475 | -- | -- | -- | -- | -- |
| EX-C-W-9 | 9'-10' | 8/7/02 | 39 | 2,600 | 570 | 2,800 | 2,839 | -- | -- | -- | -- | -- |
| EX-C-W-3 | 3'-4' | 8/7/02 | <40 | 920 | 250 | 850 | 870 | -- | -- | -- | -- | -- |
| EX-D-S-9 | 9'-10' | 8/7/02 | <100 | 4,200 | 810 | 4,200 | 4,250 | -- | -- | -- | -- | -- |
| EX-D-S-3 | 3'-4' | 8/7/02 | <10 | 340 | 72 | 300 | 305 | -- | -- | -- | -- | -- |
| EX-D-N-9 | 9'-10' | 8/7/02 | <10 | 300 | 95 | 320 | 325 | -- | -- | -- | -- | -- |
| EX-E-BW-6 | 6'-6.5' | 8/7/02 | <10 | 330 | <500 | 550 | 555 | -- | -- | -- | -- | -- |
| EX-E-BE-6 | 6'-6.5' | 8/7/02 | <10 | 780 | <500 | 730 | 735 | -- | -- | -- | -- | -- |
| EX-E-S-3 | 3'-4' | 8/7/02 | <100 | 12,000 | 2,600 | 11,000 | 11,050 | -- | -- | -- | -- | -- |
| EX-F-BB-2 | 2'-3' | 8/7/02 | <1.0 | <1.0 | <5.0 | <5.0 | 0 | -- | -- | -- | -- | -- |
| EX-F-BW-2 | 2'-3' | 8/7/02 | <1.0 | 1.8 | 8.3 | 8.1 | 9 | -- | -- | -- | -- | -- |
| Sidewall Sampling Event III | | | | | | | | | | | | |
| South Side of Property | | | | | | | | | | | | |
| EX-F-N-3 | 3'-4' | 8/10/02 | <20 | 1,300 | 220 | 1,200 | 1,210 | <0.1 | <0.1 | <0.1 | <0.1 | <1 |
| EX-F-N-9 | 9'-10' | 8/10/02 | 15 | 1,000 | 180 | 1,100 | 1,115 | <0.05 | 0.052 | 0.065 | <0.05 | <0.5 |
| EX-F-B-10 | 10'-10.5' | 8/10/02 | 11 | 1,500 | 400 | 1,300 | 1,311 | <0.05 | <0.05 | <0.05 | <0.05 | <0.5 |
| Note: EX-F is really an extension of EX-A in this case | | | | | | | | | | | | |
| Sidewall Sampling Event IV | | | | | | | | | | | | |
| North Side of Property | | | | | | | | | | | | |
| EX-C-W-9 | 9'-9.5' | 8/19/02 | 58 | 1,900 | 430 | 2,000 | 2,058 | <0.1 | <0.1 | 0.30 | <0.05 | <1 |
| EX-C-W-3 | 3'-4' | 8/19/02 | 47 | 2,600 | 540 | 2,300 | 2,347 | <0.1 | <0.1 | 0.21 | <0.05 | <1 |
| EX-B-S-3 | 3'-4' | 8/19/02 | <20 | 3,500 | 640 | 3,700 | 3,710 | <0.1 | <0.2 | <0.1 | <0.05 | <1 |
| EX-D-W-9 | 9'-9.5' | 8/19/02 | <20 | 420 | 140 | 450 | 460 | <0.1 | <0.1 | <0.1 | <0.05 | <1 |
| EX-D-W-3 | 3'-4' | 8/19/02 | 12 | 270 | 62 | 240 | 252 | <0.05 | <0.05 | 0.056 | <0.02 | <0.5 |
| EX-B-NW-9 | 9'-9.5' | 8/19/02 | 11 | 1,000 | <500 | 1,600 | 1,611 | <0.05 | <0.1 | <0.05 | <0.02 | <0.5 |
| EX-B-NW-3 | 3'-4' | 8/19/02 | <20 | 4,900 | 970 | 4,900 | 4,910 | <0.1 | <0.1 | <0.1 | <0.05 | <1 |
| EX-D-B-9 | 9'-9.5' | 8/19/02 | <20 | 650 | 160 | 590 | 600 | <0.1 | <0.1 | <0.1 | <0.05 | <1 |
| EX-D-B-3 | 3'-4' | 8/19/02 | 21 | 3,100 | 840 | 3,100 | 3,121 | <0.1 | <0.1 | <0.1 | <0.05 | <1 |
| TRENCHAB | 0'-7' | 8/17/02 | 25 | 2,500 | 560 | 2,900 | 2,925 | <0.1 | <0.1 | 0.21 | <0.05 | <1 |
| EX-H-8 | 8'-9' | 8/20/02 | 61 | 1,600 | 550 | 2,000 | 2,061 | -- | -- | -- | -- | -- |

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Table 1a. Soil Sampling Analytical Data - Hydrocarbon Analyses
 Balaam Airgas
 1350 Powell Street, Emeryville, California

| Sample ID | Depth - feet bgs | Date Sampled | TPHg | TPHd | TPHmo | TPHbo | Total | Benzene | Toluene | Ethylbenzene | Xylenes | MTBE |
|-------------------------------------|------------------|--------------|---------|-----------|---------|---------|---------|---------|---------|--------------|---------|---------|
| | | | (C6-C9) | (C10-C23) | (C-18+) | (C-10+) | TPH | | | | | |
| | | | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) |
| EPA Method: | | | 8015m | 8015 | 8015 | 8015 | | 8021 | 8021 | 8021 | 8021 | 8021 |
| Residential RBSL*: | | | 400 | 500 | 500 | NE | NE | 0.18 | 8.4 | 24 | 1.0 | 1.0 |
| South Side of Property | | | | | | | | | | | | |
| EX-A-E-9 | 9'-9.5' | 8/17/02 | <20 | 570 | 150 | 520 | 530 | <0.1 | <0.2 | <0.1 | <0.05 | <1 |
| EX-A-E-3 | 3'-4' | 8/17/02 | <20 | 180 | 45 | 160 | 170 | <0.1 | <0.2 | <0.1 | <0.05 | <1 |
| Sidewall Sampling Event V | | | | | | | | | | | | |
| South Side of Property | | | | | | | | | | | | |
| EX-A-E-9 | 9'-9.5' | 8/27/02 | 16 | 570 | 120 | 560 | 576 | <0.02 | <0.02 | 0.16 | 0.33 | <0.2 |
| EX-A-E-3 | 3'-4' | 8/27/02 | 53 | 2,300 | 650 | 2,600 | 2,653 | <0.05 | <0.05 | 0.40 | 0.57 | <0.5 |
| Sidewall Sampling Event VI | | | | | | | | | | | | |
| North Side of Property | | | | | | | | | | | | |
| BX-B-B-7 | 7'-7.5' | 9/4/02 | <20 | 160 | 41 | 140 | 150 | -- | -- | -- | -- | -- |
| BX-E-W-3 | 3'-3.5' | 9/4/02 | <50 | 1,100 | 410 | 1,100 | 1,125 | -- | -- | -- | -- | -- |
| EX-E-B-3 | 3'-3.5' | 9/4/02 | <1.0 | 66 | 45 | 70 | 71 | -- | -- | -- | -- | -- |
| BX-D-NW-9 | 9'-9.5' | 9/4/02 | <50 | 620 | 120 | 560 | 585 | -- | -- | -- | -- | -- |
| BX-D-NW-3 | 3'-3.5' | 9/4/02 | <50 | 150 | 30 | 140 | 165 | -- | -- | -- | -- | -- |
| EX-J-W-3 | 3'-3.5' | 9/4/02 | <2.0 | 46 | 18 | 44 | 45 | -- | -- | -- | -- | -- |
| BX-J-W-9 | 9'-9.5' | 9/4/02 | <20 | 220 | 66 | 230 | 240 | -- | -- | -- | -- | -- |
| EX-I-S-9 | 9'-9.5' | 9/4/02 | 26 | 1,700 | 520 | 1,600 | 1,626 | -- | -- | -- | -- | -- |
| BX-I-S-3 | 3'-3.5' | 9/4/02 | 6.3 | 290 | 97 | 310 | 316 | -- | -- | -- | -- | -- |
| Sidewall Sampling Event VI | | | | | | | | | | | | |
| North Side of Property | | | | | | | | | | | | |
| EX-J-W-3 | 3'-3.5' | 9/9/02 | 16 | 240 | 41 | 240 | 256 | -- | -- | -- | -- | -- |
| EX-J-W-9 | 9'-9.5' | 9/9/02 | 160 | 4,900 | <5,000 | 6,400 | 6,560 | -- | -- | -- | -- | -- |
| Sidewall Sampling Event VII | | | | | | | | | | | | |
| North Side of Property | | | | | | | | | | | | |
| EX-B-W-3 | 3'-3.5' | 9/13/02 | <5.0 | 440 | 110 | 470 | 473 | -- | -- | -- | -- | -- |
| BX-C-NW-3 | 3'-3.5' | 9/13/02 | <20 | 810 | 110 | 960 | 970 | -- | -- | -- | -- | -- |
| BX-C-NW-9 | 9'-9.5' | 9/13/02 | <20 | 390 | 60 | 410 | 420 | -- | -- | -- | -- | -- |
| EX-C-W-3 | 3'-3.5' | 9/13/02 | <20 | 2,400 | 1,100 | 2,800 | 2,810 | -- | -- | -- | -- | -- |
| EX-C-W-9 | 9'-9.5' | 9/13/02 | <20 | 190 | 44 | 190 | 200 | -- | -- | -- | -- | -- |
| EX-C-N-3 | 3'-3.5' | 9/13/02 | 31 | 3,100 | 1,100 | 3,400 | 3,431 | -- | -- | -- | -- | -- |
| EX-C-N-9 | 9'-9.5' | 9/13/02 | 21 | 840 | 190 | 830 | 851 | -- | -- | -- | -- | -- |
| Sidewall Sampling Event VIII | | | | | | | | | | | | |
| North Side of Property | | | | | | | | | | | | |
| EX-C-N-3 | 3'-3.5' | 9/24/02 | <1.0 | 320 | 190 | 360 | 361 | <0.005 | <0.005 | <0.005 | <0.005 | <0.05 |
| EX-C-N-9 | 9'-9.5' | 9/24/02 | 2.8 | 410 | 91 | 400 | 403 | <0.005 | <0.005 | 0.016 | <0.005 | <0.05 |
| South Side of Property | | | | | | | | | | | | |
| BX-A-SW-3 | 3'-3.5' | 9/24/02 | <1.0 | <1.0 | <5.0 | <5.0 | 0 | 0.0095 | 0.0051 | <0.005 | <0.005 | <0.05 |
| BX-A-SW-9 | 9'-9.5' | 9/24/02 | <10 | 240 | 25 | 240 | 245 | <0.05 | <0.05 | <0.05 | <0.05 | <0.5 |
| EX-A-W-9 | 9'-9.5' | 9/24/02 | 12 | 140 | <100 | 140 | 152 | <0.05 | <0.05 | 0.061 | <0.05 | <0.5 |
| EX-A-W-3 | 3'-3.5' | 9/24/02 | 2.4 | 28 | <5.0 | 27 | 29 | <0.005 | 0.0056 | 0.017 | <0.005 | <0.05 |
| EX-A-S-9 | 9'-9.5' | 9/24/02 | <1.0 | 13 | 13 | 27 | 28 | <0.005 | <0.005 | <0.005 | <0.005 | <0.05 |
| EX-A-S-3 | 3'-3.5' | 9/24/02 | 810 | 630 | 54 | 640 | 1,450 | 21 | 14 | 33 | 120 | <5.0 |

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Table 1a. Soil Sampling Analytical Data - Hydrocarbon Analyses
 Balaam Airgas
 1350 Powell Street, Emeryville, California

| Sample ID | Depth - feet bgs | Date Sampled | TPHg | TPHd | TPHmo | TPHbo | Total | Benzene | Toluene | Ethylbenzene | Xylenes | MTBE |
|---|------------------|--------------|---------|-----------|---------|---------|-------|---------|---------|--------------|---------|-------|
| | | | (C6-C9) | (C10-C23) | (C-18+) | (C-10+) | TPH | | | | | |
| EPA Method: | | | 8015m | 8015 | 8015 | 8015 | | 8021 | 8021 | 8021 | 8021 | 8021 |
| Residential RBSL*: | | | 400 | 500 | 500 | NE | NE | 0.18 | 8.4 | 24 | 1.0 | 1.0 |
| Sidewall Sampling Event IX | | | | | | | | | | | | |
| <u>North Side of Property</u> | | | | | | | | | | | | |
| EX-D-E-3 (10-20-02) | 3'-3.5' | 10/2/02 | <10 | 3,300 | 960 | 3,700 | 3,705 | <0.05 | 0.074 | <0.05 | <0.05 | <0.5 |
| <u>South Side of Property</u> | | | | | | | | | | | | |
| EX-A-S-3 (10-2-02) | 3'-3.5' | 10/2/02 | 48 | 110 | 14 | 110 | 158 | 3.5 | 0.16 | 3.1 | 4.5 | <0.5 |
| TRENCH-2-3 (10-2-02) | 3'-3.5' | 10/2/02 | <1.0 | 2.1 | <5.0 | <5.0 | 0 | <0.005 | <0.005 | <0.005 | <0.005 | <0.05 |
| TRENCH-2-9 (10-2-02) | 9'-9.5' | 10/2/02 | 6.5 | 130 | 23 | 130 | 137 | <0.02 | <0.02 | 0.030 | <0.02 | <0.2 |
| TRENCH-1-9 (10-2-02) | 9'-9.5' | 10/2/02 | <5.0 | 470 | 70 | 480 | 483 | <0.02 | <0.02 | <0.02 | <0.02 | <0.2 |
| TRENCH-1-3 (10-2-02) | 3'-3.5' | 10/2/02 | <1.0 | <1.0 | <5.0 | <5.0 | 0 | <0.005 | <0.005 | <0.005 | <0.005 | <0.05 |
| Sidewall Sampling Event X | | | | | | | | | | | | |
| <u>North Side of Property</u> | | | | | | | | | | | | |
| EX-D2-E-3 | 3'-3.5' | 10/5/02 | <10 | 2,600 | 1,500 | 3,100 | 3,105 | -- | -- | -- | -- | -- |
| EX-D2-S-3 | 3'-3.5' | 10/5/02 | <20 | 3,400 | 730 | 3,900 | 3,910 | -- | -- | -- | -- | -- |
| EX-K-N-3 | 3'-3.5' | 10/5/02 | <50 | 1,900 | <500 | 2,000 | 2,025 | -- | -- | -- | -- | -- |
| EX-K-S-3 | 3'-3.5' | 10/5/02 | 2.7 | 240 | 78 | 250 | 253 | -- | -- | -- | -- | -- |
| <u>North Side of Property</u> | | | | | | | | | | | | |
| BX-K-C-9 | 9'-9.5' | 10/7/02 | <1.0 | 22 | 5.4 | 24 | 25 | -- | -- | -- | -- | -- |
| BX-K-N-9 | 9'-9.5' | 10/7/02 | <4.0 | 350 | 57 | 360 | 362 | -- | -- | -- | -- | -- |
| BX-K-S-9 | 9'-9.5' | 10/7/02 | <1.0 | 6.3 | <5.0 | 8.5 | 9 | -- | -- | -- | -- | -- |
| Pothole Sampling under former building | | | | | | | | | | | | |
| PH-1-3 | 3'-3.5' | 11/5/02 | <5.0 | 67 | 13 | 66 | 69 | -- | -- | -- | -- | -- |
| PH-2-3 | 3'-3.5' | 11/5/02 | 2.6 | 50 | 13 | 50 | 53 | -- | -- | -- | -- | -- |
| PH-2-9 | 9'-9.5' | 11/5/02 | 19 | 940 | 180 | 920 | 939 | -- | -- | -- | -- | -- |
| PH-1-9 | 9'-9.5' | 11/5/02 | 41 | 620 | 120 | 640 | 681 | -- | -- | -- | -- | -- |
| PH-3-3 | 3'-3.5' | 11/5/02 | <1.0 | 10 | <5.0 | 9.6 | 10 | -- | -- | -- | -- | -- |
| PH-3-9 | 9'-9.5' | 11/5/02 | 84 | 7,300 | 1,500 | 6,700 | 6,784 | -- | -- | -- | -- | -- |
| EX-L-SW-3 | 3'-3.5' | 11/20/02 | <1.0 | <1.0 | <5.0 | <5.0 | 0 | -- | -- | -- | -- | -- |
| EX-L-SW-9 | 9'-9.5' | 11/20/02 | <1.0 | <1.0 | <5.0 | <5.0 | 0 | -- | -- | -- | -- | -- |
| EX-L-NW-3 | 3'-3.5' | 11/20/02 | <1.0 | <1.0 | <5.0 | <5.0 | 0 | -- | -- | -- | -- | -- |
| EX-L-NW-9 | 9'-9.5' | 11/20/02 | 67 | 3,000 | 650 | 2,800 | 2,867 | -- | -- | -- | -- | -- |
| EX-L-S-3 | 3'-3.5' | 11/20/02 | <1.0 | 1.0 | <5.0 | <5.0 | 0 | -- | -- | -- | -- | -- |
| EX-L-S-9 | 9'-9.5' | 11/20/02 | 13 | 1,100 | 270 | 1,100 | 1,113 | -- | -- | -- | -- | -- |
| EX-L-S2-9 | 9'-9.5' | 11/22/02 | <1.0 | 41 | 13 | 42 | 43 | -- | -- | -- | -- | -- |
| Stockpile Samples | | | | | | | | | | | | |
| STOCKPILE A | -- | 7/24/02 | 60 | 330 | -- | -- | -- | <0.2 | 1.4 | 1.6 | 7.8 | <2.0 |
| STOCKPILE B | -- | 7/24/02 | <1.0 | 970 | 350 | -- | -- | <0.005 | 0.0064 | 0.031 | 0.079 | <0.05 |
| STOCKPILE B2 | -- | 8/7/02 | <1.0 | 660 | 160 | 650 | 655 | -- | -- | -- | -- | -- |
| STOCKPILE C | -- | 8/7/02 | <1.0 | 200 | 41 | 210 | 215 | <0.05 | <0.05 | <0.05 | <0.05 | <0.5 |
| STOCKPILE A2 | -- | 8/27/02 | <1.0 | 44 | 40 | 84 | 85 | <0.005 | <0.005 | <0.005 | <0.005 | <0.05 |
| SP-1-1 | -- | 8/27/02 | <20 | 400 | 290 | 480 | 490 | -- | -- | -- | -- | -- |
| SP-1-2 | -- | 8/27/02 | <1.0 | 51 | 68 | 110 | 111 | -- | -- | -- | -- | -- |
| SP-1-3 | -- | 8/27/02 | 1.6 | 250 | 230 | 330 | 332 | -- | -- | -- | -- | -- |
| SP-1-4 | -- | 8/27/02 | <1.0 | 400 | 170 | 470 | 471 | -- | -- | -- | -- | -- |
| SP-1-5 | -- | 8/27/02 | <1.0 | 170 | 120 | 190 | 191 | -- | -- | -- | -- | -- |

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Table 1a. Soil Sampling Analytical Data - Hydrocarbon Analyses
 Balaam Airgas
 1350 Powell Street, Emeryville, California

| Sample ID | Depth - feet bgs | Date Sampled | TPHg | TPHd | TPHmo | TPHbo | Total | Benzene | Toluene | Ethylbenzene | Xylenes | MTBE |
|-------------------------------|------------------|--------------------|---------|-----------|---------|---------|---------|---------|---------|--------------|---------|---------|
| | | | (C6-C9) | (C10-C13) | (C-18+) | (C-10+) | TPH | | | | | |
| | | EPA Method: | 8015m | 8015 | 8015 | 8015 | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) | (mg/kg) |
| | | Residential RBSL*: | 400 | 500 | 500 | NE | NE | 0.18 | 8.4 | 24 | 1.0 | 1.0 |
| SP-1-6 | -- | 8/27/02 | 1.2 | 410 | 220 | 540 | 541 | -- | -- | -- | -- | -- |
| SP-2-1 | -- | 8/27/02 | <1.0 | 380 | 300 | 690 | 691 | -- | -- | -- | -- | -- |
| SP-2-2 | -- | 8/27/02 | <100 | 8,000 | 2,400 | 8,400 | 8,450 | -- | -- | -- | -- | -- |
| SP-2-3 | -- | 8/27/02 | <100 | 88,000 | 19,000 | 89,000 | 89,050 | -- | -- | -- | -- | -- |
| SP-2-4 | -- | 8/27/02 | <40 | 2,000 | 640 | 2,100 | 2,120 | -- | -- | -- | -- | -- |
| SP-3-1 | -- | 8/27/02 | <10 | 360 | 200 | 400 | 405 | -- | -- | -- | -- | -- |
| SP-3-2 | -- | 8/27/02 | <10 | 680 | 320 | 880 | 885 | -- | -- | -- | -- | -- |
| STOCKPILE A3 | -- | 9/30/02 | 78 | 160 | 45 | 170 | 248 | -- | -- | -- | -- | -- |
| STOCKPILE A3 (10-3-02) | -- | 10/3/02 | 25 | 940 | 180 | 860 | 885 | -- | -- | -- | -- | -- |
| N STOCKPILE 1,2,3,4 | -- | 10/7/02 | <50 | 2,700 | 950 | 3,100 | 3,125 | -- | -- | -- | -- | -- |
| COMPOSITE (SP-1 through SP-6) | | 11/5/02 | 11 | 70 | 13 | 66 | 77 | -- | -- | -- | -- | -- |
| STOCKPILE 1 | -- | 11/20/02 | <1.0 | 25 | 20 | 36 | 37 | -- | -- | -- | -- | -- |
| STOCKPILE 2 | -- | 11/20/02 | <3.3 | 170 | 59 | 180 | 182 | -- | -- | -- | -- | -- |
| Cleanup Goal | | | | | | | 1,000 | | | | | |

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Table 1a. Soil Sampling Analytical Data - Hydrocarbon Analyses
 Balaam Airgas
 1350 Powell Street, Emeryville, California

| Sample ID | Depth - feet bgs | Date Sampled | TPHg | TPHd | TPHmo | TPHbo | Total | Benzene | Toluene | Ethylbenzene | Xylenes | MTBE |
|--------------------|------------------|--------------|---------|-----------|---------|---------|-------|---------|---------|--------------|---------|------|
| | | | (C6-C9) | (C10-C13) | (C-18+) | (C-10+) | TPH | | | | | |
| EPA Method: | | | 8015m | 8015 | 8015 | 8015 | | 8021 | 8021 | 8021 | 8021 | 8021 |
| Residential RBSL*: | | | 400 | 500 | 500 | NE | NE | 0.18 | 8.4 | 24 | 1.0 | 1.0 |

Abbreviations and Notes:

* = Risk Based Screening Level (RBSL), CRWQCB, December 2001, Table B
 TPHg = Total petroleum hydrocarbons as gasoline
 TPHd = Total petroleum hydrocarbons as diesel
 TPHmo = Total petroleum hydrocarbons as motor oil
 TPHbo = Total petroleum hydrocarbons as bunker oil
 Total TPH = TPHg + TPHbo. Results below detection limits added as 1/2 the detection limit.
 MTBE = Methyl tert-butyl ether
 mg/kg = Milligrams per kilogram
 <n = Below detection limit of n mg/kg
 -- = Not analyzed

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Table 1b. Soil Sampling Analytical Data - PAHs
Balaam Airgas
1350 Powell Street, Emeryville, California

| Sample ID | Depth - feet bgs | Date Sampled | Napthalene ¹ (mg/kg) | Acenaph- thene ¹ (mg/kg) | Fluorene ¹ (mg/kg) | Phenan- therene ¹ (mg/kg) | Anthra- cene ¹ (mg/kg) | Pyrene ¹ (mg/kg) | Chrysene ¹ (mg/kg) | PCBs (mg/kg) |
|------------------------------------|------------------|--------------|------------------------------------|---|----------------------------------|--|---|--------------------------------|----------------------------------|-----------------|
| EPA Method: | | | | | | | | | | |
| Residential RBSL*: | | | 4.9 | 16 | 5.1 | 11 | 2.9 | 55 | 3.8 | NE |
| Lowney Associates Borings | | | | | | | | | | |
| SS-1 (fill) | 0'-0.5' | | <0.075 | <0.05 | <0.025 | 0.15 | <0.025 | <0.025 | 0.099 | <0.05 |
| SS-1 (native) | 3.5'-4' | | <0.015 | 0.13 | 0.44 | <0.005 | <0.005 | <0.005 | <0.005 | <0.05 |
| SS-2 (fill) | 0'-0.5' | | <0.15 | <0.1 | <0.05 | <0.05 | <0.05 | 0.014 | <0.05 | <0.05 |
| SS-2 (native) | 5'-5.5' | | <0.015 | <0.01 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.05 |
| SS-3 (fill) | 0'-0.5' | | <0.015 | <0.01 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.05 |
| SS-3 (native) | 3.5'-4' | | <0.015 | <0.01 | 0.25 | 0.075 | <0.005 | <0.005 | <0.005 | <0.05 |
| SS-4 (fill) | 0'-0.5' | | <0.075 | <0.05 | <0.025 | 0.11 | <0.025 | <0.025 | <0.025 | <0.05 |
| SS-4 (native) | 3.5'-4' | | <0.015 | <0.01 | 0.27 | 0.027 | <0.005 | <0.005 | <0.005 | <0.05 |
| SS-5 (fill) | 0'-0.5' | | <0.15 | <0.1 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| SS-5 (native) | 7'-7.5' | | <0.015 | <0.01 | 0.49 | 0.71 | <0.005 | <0.005 | <0.005 | <0.05 |
| SS-6 (fill) | 0'-0.5' | | <0.15 | <0.1 | <0.05 | <0.05 | <0.05 | 0.29 | <0.05 | <0.05 |
| SS-6 (native) | 6.5'-7' | | <0.015 | <0.01 | 0.033 | <0.005 | 0.016 | <0.005 | <0.005 | <0.05 |
| SS-7 (fill) | 0'-0.5' | | <0.015 | <0.01 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.05 |
| SS-7 (native) | 6'-6.5' | | 0.62 | <0.01 | 0.33 | 0.53 | <0.005 | <0.005 | <0.005 | <0.05 |
| SS-8 (fill) | 0'-0.5' | | <0.075 | <0.05 | <0.025 | <0.025 | <0.025 | <0.025 | <0.025 | <0.05 |
| SS-8 (native) | 7.5'-8" | | <0.015 | <0.01 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.05 |
| SS-9 (fill) | 0'-0.5' | | <0.075 | <0.05 | <0.025 | <0.025 | <0.025 | 0.2 | <0.025 | <0.05 |
| SS-9 (native) | 4.5'-5' | | <0.015 | <0.01 | 0.088 | <0.005 | 0.067 | <0.005 | <0.005 | <0.05 |
| Lowney Associates Test Pits | | | | | | | | | | |
| TP-2B | 1.5' | | 0.25 | ND | ND | 0.88 | ND | ND | ND | ND |
| Cleanup Goal | | | | | | | 1,000 | | | |

Abbreviations and Notes:

¹ = Other VOCs were not detected at or above the stated laboratory reporting limit

* = Risk Based Screening Level (RBSL), CRWQCB, December 2001, Table B

mg/kg = Milligrams per kilogram

<n = Below detection limit of n mg/kg

-- = Not analyzed

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Table 1c. Soil Sampling Analytical Data - Metals and Pesticides
Balaam Airgas
1350 Powell Street, Emeryville, California

| Sample ID | Depth - feet bgs | Date Sampled | Arsenic (mg/kg) | Cadmium (mg/kg) | Lead (mg/kg) | Mercury (mg/kg) | Organochlorine |
|------------------------------------|------------------|--------------|-----------------|-----------------|--------------|-----------------|--------------------|
| | | | | | | | Pesticides (mg/kg) |
| EPA Method: | | | | | | | |
| Residential RBSL*: | | | 0.39 | 1.7 | 200 | 4.7 | NE |
| Background Concentration**: | | | 14 | 1.5 | 14.7 | 0.3 | NE |
| Lowney Associates Borings | | | | | | | |
| SS-1 (fill) | 0'-0.5' | | <1.0 | 2.6 | 110 | <0.05 | -- |
| SS-1 (native) | 3.5'-4' | | -- | -- | 4.3 | -- | -- |
| SS-2 (fill) | 0'-0.5' | | 3.7 | 2.0 | 32 | 0.12 | ND |
| SS-2 (native) | 5'-5.5' | | 2.7 | 1.3 | 5.6 | <0.05 | ND |
| SS-6 ¹ (fill) | 0'-0.5' | | 4.3 | 2.0 | 19.0 | 0.088 | ND |
| SS-6 (native) | 6.5'-7' | | 1.8 | 2.4 | 5.6 | <0.05 | ND |
| SS-7 ¹ (fill) | 0'-0.5' | | 30 | 3.4 | 22 | 0.19 | ND |
| SS-7 (native) | 6'-6.5' | | 2.7 | 1.5 | 5.0 | <0.05 | ND |
| Lowney Associates Test Pits | | | | | | | |
| TP-2B | 1.5' | | 9.0 | 1.7 | 200 | 4.7 | -- |

Abbreviations and Notes:

* = Risk Based Screening Level (RBSL), CRWQCB, December 2001, Table B

** = Lawrence Berkeley National Laboratory Environmental Restoration Program, 1995

mg/kg = Milligrams per kilogram

<n = Below detection limit of n mg/kg

-- = Not analyzed

ND = Not detected

NE = Not established

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Table 2a. Groundwater Analytical Data - Hydrocarbon Analyses
 Balaam Airgas
 1350 Powell Street, Emeryville, California

| Sample ID | Date Sampled | TPHg (C6-C9) (ug/L) | TPHd (C10-C23) (ug/L) | TPHmo (C-18+) (ug/L) | TPHbo (C-10+) (ug/L) | Total TPH (ug/L) | Benzene (ug/L) | Toluene (ug/L) | Ethylbenzene (ug/L) | Xylenes (ug/L) | MTBE (ug/L) | Napthalene (ug/L) |
|-------------------------|--------------|---------------------------|-----------------------------|----------------------------|----------------------------|------------------------|-------------------|-------------------|------------------------|-------------------|----------------|----------------------|
| EPA Method: | | 8015m | 8015 | 8015 | 8015 | | 8021 | 8021 | 8021 | 8021 | 8021 | |
| MCL*: | | NE | NE | NE | NE | | 1.0 | 150 | 700 | 1,750 | 13 | |
| RBSL**: | | 500 | 640 | 640 | NE | | 46 | 130 | 290 | 13 | 1,800 | |
| Hicks Sampling | | | | | | | | | | | | |
| Boring 1 | 8/01 | 5400 | -- | -- | -- | -- | <5.0 | ND | ND | ND | ND | 27 |
| Boring 2 | 8/01 | 3700 | -- | -- | -- | -- | <5.0 | ND | ND | ND | 5.6 | ND |
| Boring 3 | 8/01 | 130 | -- | -- | -- | -- | <5.0 | ND | ND | ND | ND | ND |
| Boring 4A | 9/01 | 66000 | 4473 | <5.0 | -- | -- | 200 | 53 | 12 | 29.4 | ND | 59 |
| Boring 4B | 9/01 | -- | -- | -- | -- | -- | 350 | 97 | 32 | 170 | ND | 150 |
| Boring 6 | 9/01 | -- | -- | -- | -- | -- | <5.0 | ND | ND | ND | ND | ND |
| Boring 7 | 9/01 | -- | -- | -- | -- | -- | <5.0 | ND | ND | ND | ND | ND |
| Boring 9 | 9/01 | -- | -- | -- | -- | -- | <5.0 | ND | ND | ND | ND | ND |
| Lowney Sampling | | | | | | | | | | | | |
| EB-7 | 3/5/02 | 260 | 7,300 | <500 | -- | -- | <0.5 | <0.5 | <0.5 | <1.0 | <5.0 | |
| EB-8 | 3/5/02 | <50 | 100 | <580 | -- | -- | <0.5 | <0.5 | <0.5 | <1.0 | <5.0 | |
| EB-9 | 3/5/02 | 17,000 | 24,000,000 | <2,000,000 | -- | -- | <5.0 | <5.0 | <5.0 | <10 | <50 | |
| EB-10 | 3/5/02 | 5,900 | 4,400,000 | <400,000 | -- | -- | <5.0 | <5.0 | <5.0 | <10 | <50 | |
| EB-11 | 3/5/02 | 280 | 2,100 | <580 | -- | -- | <5.0 | <5.0 | <5.0 | <10 | 100 | |
| EB-12 | 3/5/02 | 170,000 | 20,000,000 | <1,500,000 | -- | -- | 5,800 | 77 | <50 | <100 | <500 | |
| Cambria Sampling | | | | | | | | | | | | |
| MW-4B | 7/24/02 | 2,700 | 2,000 | 340 | 2,100 | 4,800 | 790 | 14 | 18 | 4.5 | <10 | |
| MW-7 | 7/24/02 | 280 | 1,100 | 420 | 1,300 | 1,580 | 0.65 | <0.5 | <0.5 | <0.5 | <5.0 | |
| MW-9 | 7/24/02 | <50 | 600 | 780 | 960 | 985 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 | |
| MW-10 | 7/24/02 | 1,300 | 30,000 | 9,500 | 32,000 | 33,300 | <5.0 | <5.0 | <5.0 | <5.0 | <50 | |
| MW-11 | 7/24/02 | 280 | 1,400 | 900 | 1,800 | 2,080 | 0.51 | 1.6 | <0.5 | 0.78 | <5.0 | |
| MW-12 | 7/24/02 | 1,400 | 950 | 1,200 | 1,600 | 3,000 | 360 | 1.7 | 10 | 1.1 | <5.0 | |
| EX-A-W1 | 8/2/02 | 2,900 | 23,000 | 7,900 | 23,000 | 25,900 | 240 | 49 | 80 | 360 | <50 | |

Abbreviations and Notes:

TPHg = Total petroleum hydrocarbons as gasoline
 TPHd = Total petroleum hydrocarbons as diesel
 TPHmo = Total petroleum hydrocarbons as motor oil

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Table 2a. Groundwater Analytical Data - Hydrocarbon Analyses

Balaam Airgas
1350 Powell Street, Emeryville, California

| Sample ID | Date | TPHg (C6-C9) (ug/L) | TPHd (C10-C23) (ug/L) | TPHmo (C-18+) (ug/L) | TPHbo (C-10+) (ug/L) | Total TPH (ug/L) | Benzene (ug/L) | Toluene (ug/L) | Ethylbenzene (ug/L) | Xylenes (ug/L) | MTBE (ug/L) | Napthalene (ug/L) |
|-----------|--------------------|---------------------------|-----------------------------|----------------------------|----------------------------|------------------------|-------------------|-------------------|------------------------|-------------------|----------------|----------------------|
| | EPA Method: | 8015m | 8015 | 8015 | 8015 | | 8021 | 8021 | 8021 | 8021 | 8021 | |
| | MCL*: | NE | NE | NE | NE | | 1.0 | 150 | 700 | 1,750 | 13 | |
| | RBSL**: | 500 | 640 | 640 | NE | | 46 | 130 | 290 | 13 | 1,800 | |

TPHbo = Total petroleum hydrocarbons as bunker oil

MTBE = Methyl tert-butyl ether

ug/L = Micrograms per liter

<n = Below detection limit of n mg/kg

* = Drinking water Maximum Contaminant Levels - California DHS, January 11, 2001

** = Risk Based Screening Level (RBSL), CRWQCB, December 2001, Table B

NE = Not established

-- = Not analyzed/Not applicable

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Table 2b. Groundwater Analytical Data - Volatile Organic Compounds
 Balaam Airgas
 1350 Powell Street, Emeryville, California

| Sample ID | Date Sampled | Screen Interval | n-Butylbenzene ¹ | Sec-Butylbenzene ¹ | Iso-Propylbenzene ¹ | Napthalene ¹ | n-Propylbenzene ¹ |
|--------------------|--------------|-----------------|-----------------------------|-------------------------------|--------------------------------|-------------------------|------------------------------|
| EPA Method: | | | | | | | |
| | | | MCL*: | NE | NE | NE | NE |
| | | | RBSL**: | NE | NE | NE | 24 |
| EB-7 | 3/5/02 | -- | <1.0 | 3.4 | <0.5 | 4.2 | <1.0 |
| EB-8 | 3/5/02 | -- | <1.0 | <1.0 | <0.5 | <1.0 | <1.0 |
| EB-9 | 3/5/02 | -- | 42 | 45 | 29 | 22 | 28 |
| EB-10 | 3/5/02 | -- | 23 | 21 | 14 | 20 | 13 |
| EB-11 | 3/5/02 | -- | 20 | 25 | 14 | 16 | <10 |
| EB-12 | 3/5/02 | -- | <100 | <100 | <50 | <100 | <100 |

Abbreviations and Notes:

¹ = Other VOCs were not detected at or above the stated laboratory reporting limit

TPHg = Total petroleum hydrocarbons as gasoline

TPHd = Total petroleum hydrocarbons as diesel

TPHmo = Total petroleum hydrocarbons as motor oil

TPHbo = Total petroleum hydrocarbons as bunker oil

MTBE = Methyl tert-butyl ether

ug/L = Micrograms per liter

<n = Below detection limit of n mg/kg

* = Drinking water Maximum Contaminant Levels - California DHS, January 11, 2001

** = Risk Based Screening Level (RBSL), CRWQCB, December 2001, Table B

NE = Not established

-- = Not analyzed