CAMBRIA

Fax

To:	Eva Chu
Company:	ACHCSA
Fax:	(510) 337-9335
Phone:	(510) 567-6762
	Cc: David Diamond, Mark Arniola,
From:	Bob Clark-Riddell
Phone:	(510) 420-3303
Pages:	10, including cover
Date:	February 6, 2003February 6, 2003
Re:	Requested Information 1350 Powell Street, Emeryville

Hard Copy to Follow? **Yes** ☐ **No** X

Eva,

Here is some of the information you requested during our meeting yesterday. Enclosed is the additional sampling data from temporary well TW-6, and a figure showing soil sample results from at or near the bottom of the excavation. Because the figure is 11" x 17", I have enclosed a reduced copy as well as three pages comprising the 11" x 17" figure.

Cambria has sent via email the remainder of the requested information – site photographs and a discussion of soil sampling results near the excavation floor.

Thank you again for your assistance and attention to this matter.

Additional Groundwater Data – TW-6 only 260 ug/L total TPH

In response to your concern about the concentration of 5,000 ug/L total TPH from temporary well TW-6 on December 4, 2002, Cambria resampled TW-6 on December 18, 2002. The sample event was conducted after the recent rains, and should help evaluate conditions during the rainy season. The prior sample may be considered more representative of the pre-rainy season.

As shown on the attached laboratory report, well TW-6 contained only 260 ug/L total TPH (total of TPHg and TPH bunker oil). No BTEX, TPHg, or TPHmo were detected. This additional data suggests that onsite groundwater is well below the cleanup goal of 20,000 ug/L total TPH. Furthermore, these residual concentrations are from non-volatile hydrocarbons and do not pose a vapor concern for site occupants. And since onsite groundwater is not being protected for potable water, no further sampling is merited.

Bob Clark-Riddell Signature Bob Clark-Riddell Principal Engineer

Cambria Environmental Technology, Inc. 1144 65th Street Suite B Oakland CA 94608 Tel (510) 420-0700 Fax (510) 420-9170

NOTE: Samples Representative of Native Soil at or near Excavation Floor

EXPLANATION

Depth	TPHg	TPHd	TPHmo	Total*

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

- Approximate location of excavation sidewall soil sample (Cambria, 2002)
- Approximate location of excavation floor 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)

Excavation boundary

2' depth range | 10' depth range | 16' depth range

6' depth range | 13' depth range

* - Total TPH does not equal cumulative result of TPHg + TPHd + TPHmo for excavation confirmation samples. To avoid quantification of overlapping results, Total TPH = TPHg (C5-C8) + TPHbo (C10+) for soil and sidewall samples during excavation in 2002 (TPHbo = TPH bunker oil).

3	<2.0	46	18	44
9	<20	220	66	230

NOTE
- TOTAL EXCAVATION FLOOR AREA = 23,000 sf
- SAMPLES FROM BOTTOM, SIDEWALL WITHIN BOUNDARY OF EXCAVATION, AND PRE-REMEDIATION BORINGS FOR SOIL AT OR NEAR EXCAVATION BOTTOM = TOTAL OF 24 SAMPLES
- 23,000 ÷ 24 SAMPLES = 1 SAMPLE EVERY 958 SF

2	<1.0	1.8	8.3	8.3
8	<10	330	<500	330
7	<20	100	41	140
2	<1.0	<1.0	<5.0	<5
6	<10	780	<500	780
6–6½	36	180	92	278
12–12½	<1.0	12	<50	37
10	<20	200	35	180
9	<1.0	22	5.4	24
10	7.4	39	18	35

Soil beyond bold excavation boundary mixed in deep excavation and replaced with clean import material to at least 5 feet below grade

Pre-remediation boring 350 TPHd (9-9.5)

Key for Hydrocarbons Data

Building 1350 Powell St.

POWELL STREET

0 20 40 80
Scale (ft)

FIGURE 6

Balsam Property
1350 Powell Street
Emeryville, California

Pre- and Post-Remediation Conditions in Soil and Excavation Extents

CAMBRIA

EXPLANATION

Depth	TPHg	TPHd	TPHmo	Total*

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

- ▣ - Approximate location of excavation sidewall soil sample (Cambria, 2002)
- ◧ - Approximate location of excavation floor 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)

Excavation boundary

2' depth range | 10' depth range | 16' depth range

6' depth range | 13' depth range

* - Total TPH does not equal cumulative result of TPHg + TPHd + TPHmo for excavation confirmation samples. 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).

NOTE: Samples at OR NE

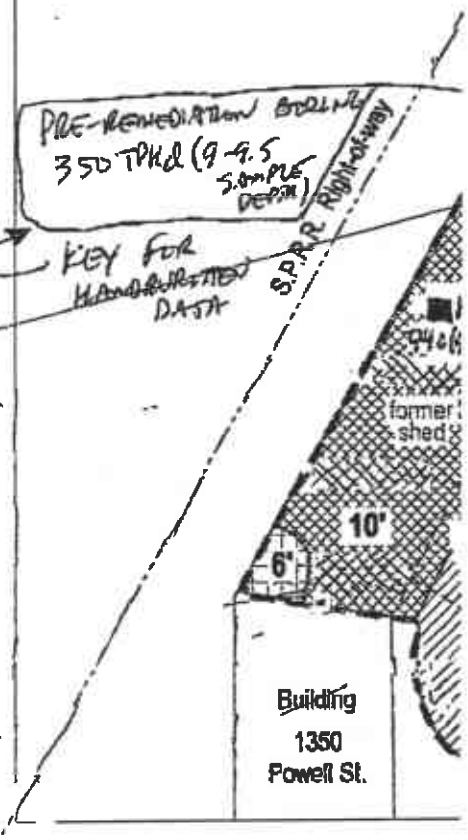
2	<1.0	1.8	8.3	8.1
6	<10	330	<500	550

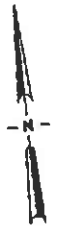
HICKS 2 500 (6-12'

3	<2.0	46	18	44
9	<20	220	66	230

NOTE

- TOTAL EXCAVATION FLOOR AREA ≈ 23,000 SF
- SAMPLES FROM BOTTOM, SIDEWALL WITHIN BOUNDARY OF EXCAVATION, AND PRE-REMEDIATION BORINGS FOR SOIL AT OR NEAR EXCAVATION BOTTOM = TOTAL OF 24 SAMPLES
- 23,000 SF ÷ 24 SAMPLES = 1 SAMPLE EVERY 958 SF





POWELL STREET

0 20 40 80

Scale (ft)

NOTE: Samples Representative of Native Soil at or near Excavation Floor

2	<1.0	1.8	8.3	8.1
6	<10	330	<500	550

7	<20	160	41	140

mg/kg)
shown in bold

ple (Cambria, 2002)
(Cambria, 2002)
ssociates, 2002)
Associates, 2002)
s, 2001)

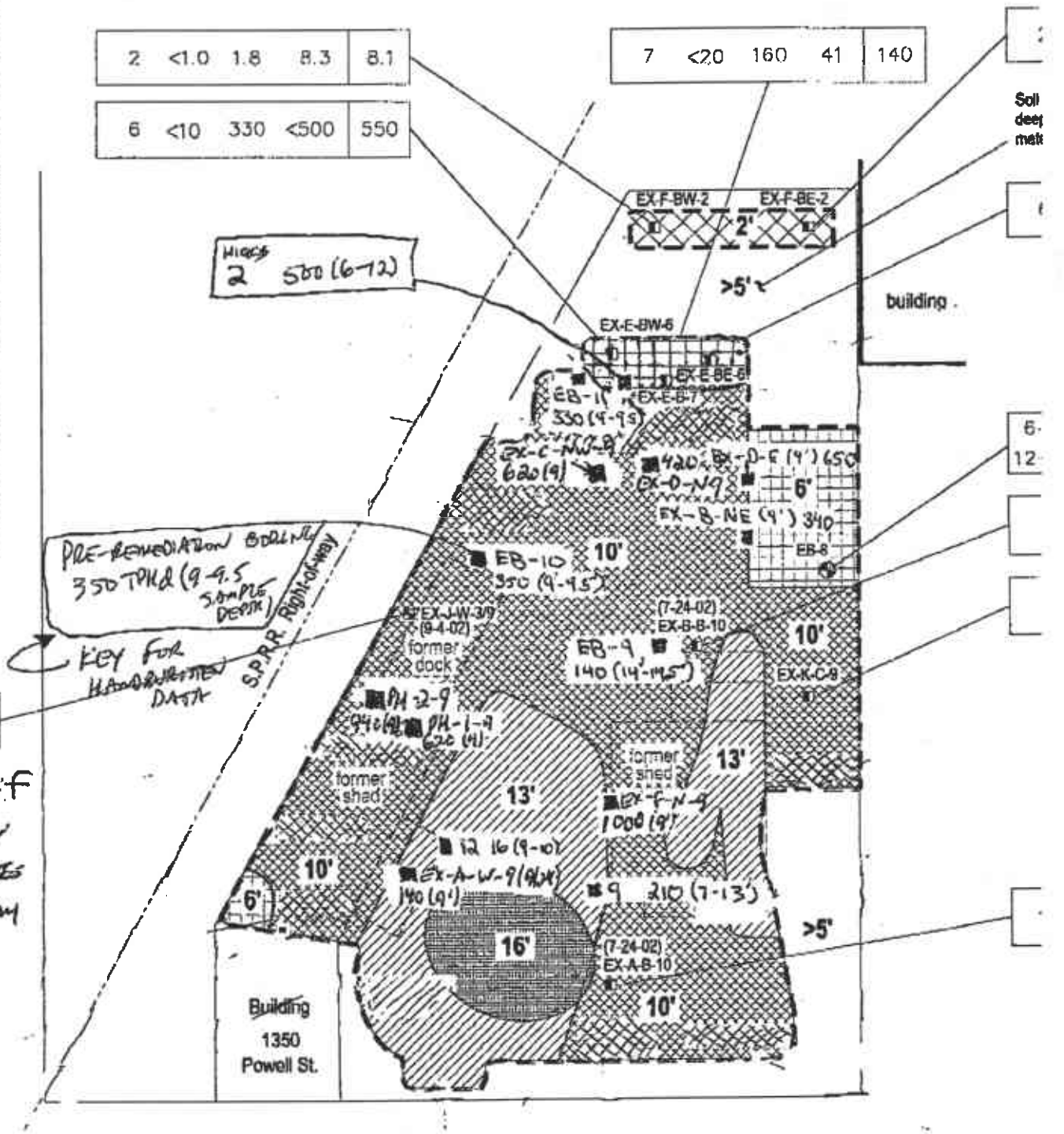
16' depth range

d + TPHmo for
overlapping results,
ewall samples during

6	18	44
20	66	230

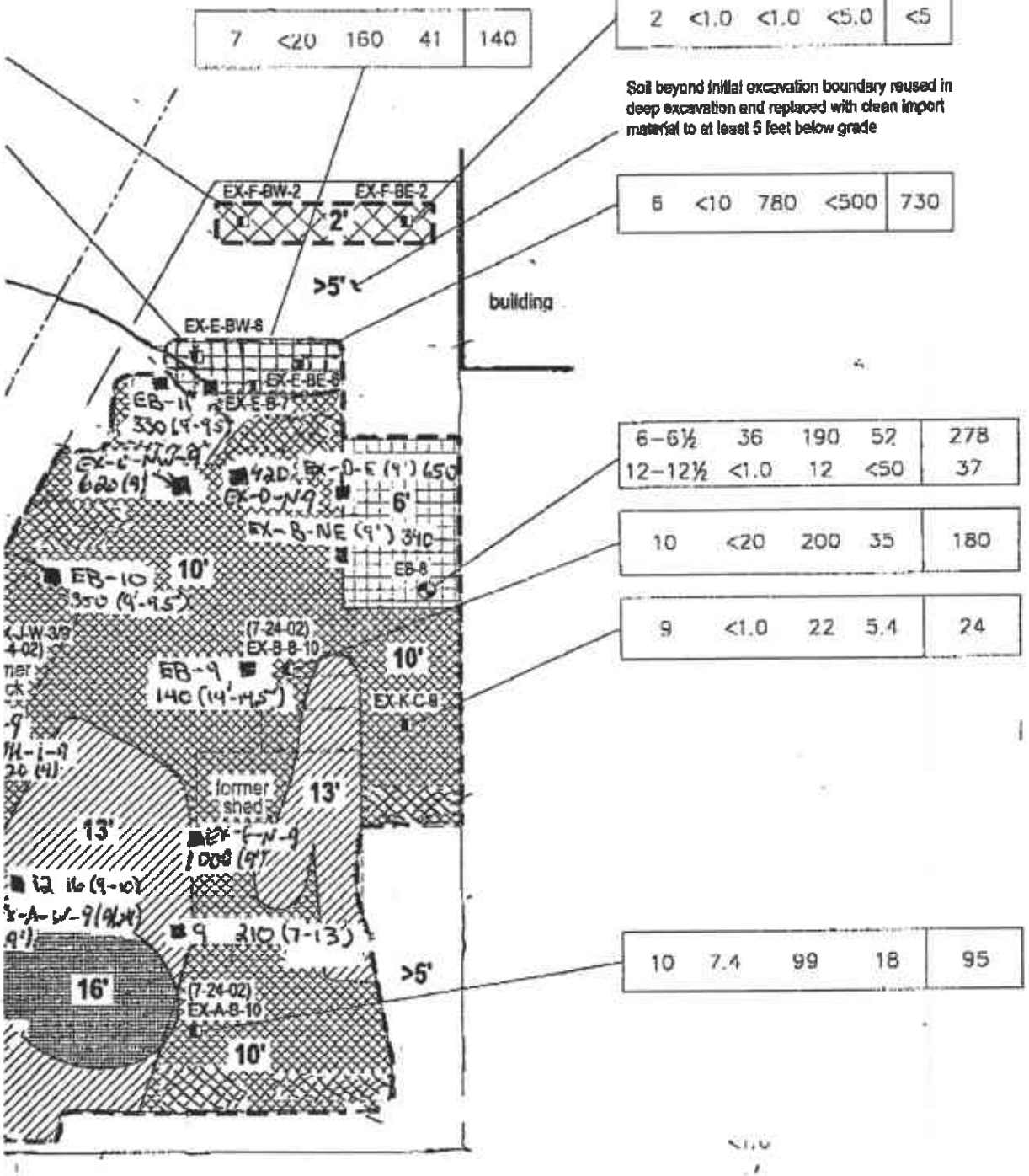
EA ≈ 23,000 sf
WITHIN BOUNDARY
CAVATION CURVES
EXCAVATION BOTTOM

ES =
VERY 958 sf



WELL STREET

epresentative of Native Soil
Excavation Floor



PRE- AND Post-Remediation Conditions in Soil and Excavation Extents

AT ORIGINAL EXCAVATION BOTTOM

CAMBRIA

Balaam Property
1350 Powell Street
Emeryville, California

FIGURE
6

McCAMPBELL ANALYTICAL INC.
110 2nd Ave South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
http://www.mccampbell.com E-mail: main@mccampbell.com

Date: 12-19-02

ATTN: Rob Clark - Riddell

Message: Rush Results for # 502-1795

FROM: Michelle

Number of pages faxed including this one: 10

0212330 **RUSH**

McCAMPBELL ANALYTICAL INC.

110 2nd AVENUE SOUTH, #D7
PACHECO, CA 94553-5160
Telephone: (925) 798-1620 Fax: (925) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME: ☐ RUSH ☒ 24 HOUR ☐ 48 HOUR ☐ 5 DAY

EDF Required? ☒ Yes ☐ No

Report To: Bob Clark-Riddell Bill To: SAME

Company: Cambria Environmental Technology Inc.

6262 Hollis Street

Emeryville, CA 94608 E-mail: briddell@cambrainc.com

Tele: 510) 420 3303 Fax: 510-450-8295

Project #: 502-1775 Project Name: Balsam Apts

Project Location: 1350 Powell St., Emeryville

Sampler Signature:

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX: Water	Soil	Air	Sludge	Other	METHOD PRESERVED: Ice	HCl	HNO3	Other
TW-6		12/18/02	3:45p	5	VOA	X					X	X		

Analysis Request

BTEX & TPH as Gas (602/8020 + 8015) MTBE	TPH as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 601 / 8010	BTEX ONLY (EPA 602 / 8020)	EPA 608 / 8080	EPA 608 / 8080 PCB's ONLY	EPA 624 / 8240 / 8260	EPA 625 / 8270	PAH's / PNA's by EPA 625 / 8270 / 8310	CAM-17 Metals	LUFT 5 Metals	Lead (7240/7421/239.2/6010)	RCI

Other: TPH, BTEX TPHd/mo/bio w/silica gel cleanup

Comments

Relinquished By: Date: 12/18/02 Time: 3:30 Received By:

Relinquished By: TLC Date: 12/18/02 Time: 4:05 Received By:

Relinquished By: TLC Date: 12/18/02 Time: 5:00 PM Received By: Mich Valles

Remarks: NO OVERLAP IN CARBON RANGE

FEB-07-2003 11:31 CAMBRIA P.07/10

McCampbell Analytical Inc.
110 Second Avenue South, #D7
Pacheco, CA 94553-5560
(925) 798-1620

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0212330

Client:
Cambria Env. Technology
5262 Hollis St.
Emeryville, CA 94608

TEL: (510) 450-1983
FAX: (510) 450-8295
ProjectNo. #502-1795; Balaam Airgas
PO:

Date Received: 12/18/02
Date Printed: 12/18/02

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests: SW8015C	8021B/8015
0212330-001	TW-5	Water	12/18/02 3:00:00 PM		B	A

Prepared by: Sonia Valles

Comments:

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

McCampbell Analytical Inc.
1534 2nd Avenue South, #207, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
http://www.mccampbell.com E-mail: main@mccampbell.com

Cambria Env. Technology	Client Project ID: #502-1795; Balaam Airgas	Date Sampled: 12/18/02
		Date Received: 12/18/02
6262 Hollis St.	Client Contact: Bob Clark-Riddell	Date Extracted: 12/19/02
Emeryville, CA 94608	Client P.O.:	Date Analyzed: 12/19/02

Client Defined Gasoline Range (C6-C9) Volatile Hydrocarbons as Gasoline with BTEX *

Extraction method: SW5030a Analytical methods: SW8021B/8015Cm Work Order: 0212330

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	TW-6	W	ND	---	ND	ND	ND	ND	1	104
Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	5.0	0.5	0.5	0.5	0.5	ug/L		
	S	1.0	0.05	0.005	0.005	0.005	0.005	mg/Kg		

*water and vapor samples are reported in ug/L, soil and sludge samples in mg/kg, wipe samples in µg/wipe, and TCLP extracts in µg/L.

z cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~2 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas), m) no recognizable pattern.

DHS Certification No. 1644

Edward Hamilton, Lab Director

McCampbell Analytical Inc.
110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
Telephone: 925-798-1620 Fax: 925-798-1622
http://www.mccampbell.com E-mail: main@mccampbell.com

Cambria Env. Technology	Client Project ID: #502-1795; Balsam Airgas	Date Sampled: 12/18/02
6262 Hollis St		Date Received: 12/18/02
Emeryville, CA 94608	Client Contact: Bob Clark-Riddell	Date Extracted: 12/18/02
	Client P.O.:	Date Analyzed: 12/18/02

Diesel(C10-23) Motor Oil(C18+) Bunker Oil(C10+) Range Extractable Hydrocarbons with Silica Gel Clean-Up*

Extraction method: SW3510C Analytical methods: SW8015C Work Order: 0212330

Lab ID	Client ID	Matrix	TPH(d)	TPH(mo)	TPH(bo)	DF	% SS
0212330-001B	TW-6	W	75,b	ND	260	1	104

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	250	250		µg/L
	S	NA	NA	NA		mg/Kg

* water and vapor samples are reported in µg/L, wipe samples in ug/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all TCLP / STLC / SPLP extracts in µg/L.

cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant); d) gasoline range compounds are significant; e) unknown medium boiling point pattern that does not appear to be derived from diesel; f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~2 vol. % sediment; k) kerosene/kerosene range; l) bunker oil; m) fuel oil; n) stoddard solvent / mineral spirit.

DHS Certification No. 1644

Edward Hamilton, Lab Director