SEMCO ENVIRONMENTAL CONTRACTORS & GENERAL ENGINEERING 93/50/2 70///50 LICENSE # 449864 A, B, C-61/D-40 1741 LESLIE STREET

SAN MATEO, CALIFORNIA 94402 (415) 572-8033

5110 1686

February 18, 1993

Alameda County Health Care Agency 80 Swan Way, Room 200 Oakland, CA 94621

Re: 5521 Doyle Street, Emeryville

Attn: Susan Hugo

Pursuant to our conversation this morning at 8:00 a.m., please find enclosed the analytical results for the excavated materials resulting from the tank closures at the above referenced property.

As both tanks were constructed of fiberglass, all backfill material as per code and warranty was of pea gravel consistency. As per the request of Brian Healy, samples of the gravel were collected, properly sealed, iced and recorded on a chain of custody. Samples were transported to Superior Analytical for required and requested analysis. This sample is referenced and identified as #4-6K'S-Comp. As you can verify, the pea gravel was for all intent and purposes non-detected. We also discussed the notation of the apparent pin hole at the reinforced rib. The rib construction is originally made with a cardboard support frame structure over the fiberglass tank shell which is then laminated with fiberglass which forms the reinforcing rib. As this rib is not required to be liquid tight, particular attention is not given to being completely sealed. The liquid which was noted emanating from this point was simply baywater which had seeped into the rib.

Thank You, Cluck Ky

Chuck Kiper Vice-President SEMCO-SAN MATEO

CK:jms

Enclosures

DFC 22 1992 SM DEC 22 1992



Superior Precision Analytical, Inc.

P.O. Box 1545 * Martinez, California 94553 * (\$10) 229-1590 / fax (\$10) 229-0916

O.F. ANALYSIS CERTIFICATE

LABORATORY NO.: 87454

CLIENT: SEMCO

CLIENT JOB NO.: CLEMENITINA

-DATE RECEIVED: 12/16/92 DATE REPORTED: 12/17/92

DATE SAMPLED : 12/15/92

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS by Modified EPA SW-846 Method 8015

LAB Sample Identification #4-6K'S-COMP 1

Concentration (mg/kg) Diesel Range Gasóline Range

ND<10

ND<10

mg/kg - parts per million (ppm)

Method Detection Limit for Gasoline in Soil: 10 mg/kg Method Detection Limit for Diesel in Soil: 10 mg/kg

QAQC Summary:

Daily Standard run at 200mg/L: RPD Gasoline = 7% RPD Diesel =

MS/MSD Average Recovery = 112%: Duplicate RPD = 13%

Richard Srna.

LABORATORY NO.: 87454

CLIENT: SEMCO

LAB

CLIENT JOB NO.: CLEMENITINA

Sample Identification

#4-6K'S-COMP

DATE RECEIVED:12/16/92
- DATE REPORTED:12/17/92
- DATE SAMPLED: 12/15/92

ANALYSIS FOR BENZENE, TOLUENE, ETHYL BENZENE & XYLENES by EPA SW-846 METHODS 5030 and 8020

Concentration (mg/kg)
Ethyl
Benzene Toluene Benzene Xylenes
ND<0.003 0.005 ND<0.003 0.007

mg/kg - parts per million (ppm)

Method Detection Limit in Soil:0.003 mg/kg

QAQC Summary:

QAQC Summary:

Daily Standard run at 20 µg/L: RPD 215 MS/MSD Average Recovery = 96%: Duplicate RPD = <8%

Richard Srna, Ph.D.

Laboratory Director

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1555 Burke, Unit I * San Francisco, California 94124 * (415) 647-2081 / fax (4

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CERTIFICATE OF ANALYSI

LABORATORY NO.: 55963

CLIENT: SEMCO

CLIENT JOB NO.: CLEMENTINA

DATE RECEIVED: 01/11/93

DATE REPORTED: 01/12/93

ANALYSIS FOR BENZENE, TOLUENE, ETHYL BENZENE & XYLENES by EPA SW-846 Methods 5030 and 8020

		Concentration(ug/L)
LAB		Ethy1
#	Sample Identification	Benzene Toluene Benzene Xylenes

1	#1-H2O-10K	ND<0.3 ND<0.3 0.6 14
2	#2-H20-8K	ND<0.3 ND<0.3 ND<0.3 ND<0.3

ug/L - parts per billion (ppb)

Method Detection Limit in Water: 50 ug/L

QAQC Summary:

Daily Standard run at 20 ug/L: RPD # <15% ...

MS/MSD Average Recovery = 91%: Duplicate RPD = 0.9%

Richard Srna, Ph.D.

Laboratory Manager

Certified Laboratories

S E M C O 1741 LESLIE STREET SAN MATEO, CA 94402

DATE:	12-17-92
TO:	Alameda Country
	•
Please	find enclosed the soil analysis for:
	5521 Doyle St.
·	Energuille

A final report containing manifests and sample locations will be forwarded to you after compilation of all receipts, documents and permits pertaining to this tank removal.

Sincerely, 14 0000 75

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Consultant Name SEMCO									·	TURN AROUND TIME (Circle One)							SUPE	RIOR ANALYTICAL, INC
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Project Manager -	TERRY	Han	_11/2	<u>. </u>							24				Day		415/	229-1512 415/647-2081
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P.O. Box 1545 Martinez, California 94553 (510) 229-1590 / fax (510) 229-0916

CERTIFICATE OF ANALYSIS

LABORATORY NO.: 87454

CLIENT: SEMCO

CLIENT JOB NO.: CLEMENITTNA

DATE RECEIVED: 12/16/92 DATE REPORTED: 12/17/92

DATE SAMPLED: 12/15/92

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS by Modified EPA SW-846 Method 8015

LAB		Concentrati	on (mg/kg)
#	Sample Identification	Gasoline Range	Diesel Range
1	#4-6K'S-COMP	ND<10	ND<10

mg/kg - parts per million (ppm)

Method Detection Limit for Gasoline in Soil: 10 mg/kg Method Detection Limit for Diesel in Soil: 10 mg/kg

QAQC Summary:

Daily Standard run at 200mg/L: RPD Gasoline = 7% RPD Diesel = 5% MS/MSD Average Recovery = 112%: Duplicate RPD = 13%

Richard Srna, Ph.D.

Laboratory Directo

Certified Laboratories

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SUPERIOR MARTINEZ

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P.O. Box 1545 • Martinez, California 94553 • (510) 229-1590 / fax (510) 229-0916

ANALYSIS CERTIFICATE OF

LABORATORY NO.: 87454

CLIENT: SEMCO

CLIENT JOB NO .: CLEMENITTNA

DATE RECEIVED:12/16/92 DATE REPORTED:12/17/92

DATE SAMPLED : 12/15/92

ANALYSIS FOR BENZENE, TOLUENE, ETHYL BENZENE & XYLENES by EPA SW-846 METHODS 5030 and 8020

Concentration (mg/kg)

Ethyl

Benzene

Toluene Benzene

Xylenes

ND<0.003 0.005 ND<0.003

0.007

LAB Sample Identification #4-6K'S-COMP

mg/kg - parts per million (ppm)

Method Detection Limit in Soil:0.003 mg/kg

QAQC Summary:

Daily Standard run at 20 μ g/L: RPD = <15%

MS/MSD Average Recovery = 96%: Duplicate RPD = <8%

Richard Srna, Ph.D.

Laboratory Director

Certified Laboratories

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P.O. Box 1545 • Martinez, California 94553 • (510) 779-1590 / fax (510) 229-0916

CERTIFICATE OF ANALYSIS

LABORATORY NO.: 87398

CLIENT: SEMCO

CLIENT JOB NO.: CLEMENTINA

DATE RECEIVED:12/10/92 DATE REPORTED:12/17/92 DATE SAMPLED:12/10/92

ANALYSIS FOR TOTAL LEAD by SW-846 Method 6010

# #AB	Sample Identification	Concentration(mg/kg) Total Lead
1 2 3	#1-D-SW-13' #2-D-SE-13' #3-G-NW-13' #4-G:NE 13'	7 5 ND<5 5

mg/kg - parts per million (ppm)

Method Detection Limit for Lead in Soil: 5 mg/kg

QAQC Summary: MS/MSD Average Recovery : 84%

Duplicate RPD : 1%

Richard Srna, Ph.D.

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1555 Burke, Unit L. San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

CERTIFICATE OF ANALYSIS

LABORATORY NO.: 55881

CLIENT: SEMCO

CLIENT JOB NO.: CLEMENTINA

DATE RECEIVED: 12/10/92

DATE REPORTED: 12/17/92

ANALYSIS FOR BENZENE, TOLUENE, ETHYL BENZENE & XYLENES by EPA SW-846 Methods 5030 and 8020

			Concentr	ation(mg/	'kg)
 # 	Sample Identification	Benzene	Toluene	Ethyl Benzene	Xylenes
1	#1-D-SW-13'	ND<.003	ND<.003	ND<.003	ND<.003
2	#2-D-SE-13 *	ND<.003	ND<.003	ND<.003	ND<.003
3	#3-G-NW-13'	ND<.003	ND<.003	ND<.003	ND<.003
4	#4-G-NE-13'	ND<.003	ND<.003	ND<.003	ND<.003

mg/kg - parts per million (ppm)

Method Detection Limit in Soil: 0.003 mg/kg

QAQC Summary:

Daily Standard run at 20ug/L: %Diff 8020 = <15% MS/MSD Average Recovery = 90%: Duplicate RPD = 3%

Richard Srna, Ph.D.

Laboratory Manager



1555 Burke, Unit 1 • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

CERTIFICATE OF ANALYSIS

LABORATORY NO.: 55881

CLIENT: SEMCO

CLIENT JOB NO.: CLEMENTINA

DATE RECEIVED: 12/10/92

DATE REPORTED: 12/17/92

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS by Modified EPA SW-846 Method 5030 and 8015

LAB #	Sample Identification	Concentration (mg/kg) Gasoline Range
1 2	#1-D-SW-13' #2-D-SE-13'	ND<1
3 4	#3-G-NW-13' #4-G-NE-13'	ND<1 ND<1 ND<1

mg/kg - parts per million (ppm)

Method Detection Limit for Gasoline in Soil: 1 mg/kg

QAQC Summary:

Daily Standard run at 2mg/L: %Diff Gasoline = <15 MS/MSD Recovery = 96%: Duplicate RPD = 9%

Richard Srna, Ph.D.

Laboratory Manager



1555 Burke, Unit I = San Francisco, California 94124 = (415) 647 2081 / fax (415) 871-7123

CERTIFICATE OF ANALYSIS

LABORATORY NO.: 55881

CLIENT: SEMCO

CLIENT JOB NO.: CLEMENTINA

DATE RECEIVED: 12/10/92

DATE REPORTED: 12/17/92

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS by Modified EPA SW-846 Method 8015

LAB # 	Sample Identification	Concentration (mg/kg) Diesel Range
1	#1-D-8W-13'	ND<10
2	#2-D-SE-13'	ND<10
3	#3-G-NW-13'	ND<10
4	#4-G-NE-13'	ND<10

mg/kg - parts per million (ppm)

Minimum Detection Limit for Diesel in Soil: 10mg/kg

QAQC Summary:

Daily Standard run at 200mg/L: %DIFF Diesel = <15% MS/MSD Average Recovery = 70%: Duplicate RPD = 1%

Richard Srna, Ph.D.