AUG-25-'95 FRI 16:11 ID:PSI/SF 510-685-2991 TEL NO:510/284-3070 #805 P01

PSI **Professional Service Industries, Inc.**

ADDRESS/TELEPHONE	FAX NUMBER(S)
2280 BATES AV. SUITE D CONCORD, CA 94520 (510) 685-2488	(510) 685-2991

COVER PAGE

DATE: 8/25/95 TIME: 4:15 AM PM

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TO:

NAME: Barney Chan

FIRM:

CITY:

FAX NO.: 337 9335

FROM:

NAME: J. P. Derhake

IF YOU DO NOT RECEIVE ALL PAGES, PLEASE CALL ASAP.

OPERATOR:

NOTES:

① S.V. extr ② onsite aeration

③ exc + dispose

8/30/95 Sp w/ J. Derhake

Realistically PSI will provide a F.S. by 9/8/95. They'll decide from the above 3 + meet w/ County to discuss, then another cap + schedule will be made

Joseph P. Derhake

Department Manager, Environmental Services

RELEVANT EXPERIENCE

As the Department Manager of Environmental Services for Professional Service Industries, Inc. (PSI), Mr. Derhake is responsible for insuring that all Phase I Environmental Site Assessments (ESAs), soil and groundwater testing, remediation design, and environmental audits performed by PSI in Northern California are executed in the most client responsive and efficient fashion possible. Mr. Derhake has worked as a project engineer on Superfund cleanups, heavy metal cleanups, and LUST cleanups, and has served as a project manager for several Phase II and Phase III contamination assessments, tank removals, and Phase I ESAs.

CERTIFICATIONS

E.I.T. Professional Engineering
Environmental Site Assessment Certified - Phase I & II
EPA-accredited Asbestos Inspector,Contrator/Supervisor, and Management Planner
40-hour Hazardous Waste Worker
Certified Environmental Professional
Army Corps of Engineers Approved Site Supervisor

MEMBERSHIPS AND AFFILIATIONS

American Institute of Chemical Engineers
Chi Epsilon

EDUCATION

B.S. Civil/Environmental Engineering, Michigan State University, 1993.
University of California, Berkeley Extension, Environmental Law program

PROJECT EXPERIENCE

* CPC Chemical, Superfund Site Remediation Pilot Study, Cordova, MI
* Wisconsin Fuel and Light, Superfund Site Remediation Project, Wisconsin
* Army Corps of Engineers Projects:
  Holloman Air Force Base, Remediation System Installation, Alamogordo, NM
  Bergstrom Air Force Base, Site Characterization & Phase III, Austin, TX
  Carswell Air Force Base, Phase III Site Assessment, Fort Worth, TX
* Visucraft, Heavy Metals Cleanup, El Paso, TX
* Suburban Propane, Tank Removals, Phase IIIs, Remediation Design
  Phoenix, AZ, Tracy, CA and Fresno, CA
* Lockheed Corporation, Groundwater Investigation, TCE Plume, Fort Worth, TX
* Citibank, Phase I ESAs, Asbestos and Lead Based Paint Surveys, California
* Anheuser-Busch, Inc., Lead and Waste Oil Cleanup, Houston, TX
* Lennar Partners Northeast, Underground Storage Tank, Soil and Groundwater Investigation, Tahoe Vista, CA
* U.S. Mint, Underground Storage Tank Closures and Groundwater Investigation, San Francisco, CA
* U.S. Coast Guard, Soil and Groundwater Investigations, Monterey and Alameda, CA
* MCI, Subsurface Investigation and Remediation, San Francisco, CA

Glenn G. Hilton, RG

Project Geologist

RELEVANT EXPERIENCE

Mr. Hilton, a project geologist for Professional Service Industries, Inc., is primarily responsible for the design and implementation of site characterization studies and management of sampling programs for soil and groundwater sites impacted with chlorinated and petroleum hydrocarbons, volatile organics, and metals.

Mr. Hilton is a California Registered Geologist with a diverse professional background. He has conducted and managed a variety of environmental geotechnical, and petroleum exploration projects. In the environmental industry, he has prepared Phase I Environmental Site Assessments, conducted Site Characterization Studies for soil and groundwater contamination, implemented and managed groundwater monitoring activities, and has assisted in the design and implementation of remedial action programs for impacted soil and groundwater.

In addition, Mr. Hilton's field experience includes supervising drilling, mapping, well installation, and geochemical sampling of soil and groundwater. He has logged boreholes drilled by hollow stem auger, bucket auger, mud rotary, and air percussion methods.

CERTIFICATIONS

California Registered Geologist, #5318

EDUCATION

M.S. Geology, University of Texas at Dallas, 1986.
B.S. Geology, University of Texas at Dallas, 1981.

PROJECT EXPERIENCE

* Home Savings of America, National Contract
* Midland Loan Services, Retainer Contract
* J.E. Roberts Companies
* Tokai Bank of California
* Colony Advisors, National Contract
* Site Characterization and Soil Remediation, Large Automotive Facility, Phoenix, Arizona
* Site Characterization, Numerous Active Service Stations, Southern California
* Soil and Groundwater Characterization, Major Styrene Facility, Santa Ana
* Characterized Chlorinated Hydrocarbon Plume, Warehouse, Carson
* Soil Characterization, L.A. County Transit Commission
* Phase I Environmental Site Assessments, California, Arizona, Nevada, Utah

Jules Cohen, Ph.D., P.E.

Vice President, Program Development

RELEVANT EXPERIENCE

Dr. Cohen has 23 years' experience as a commissioned officer in the U.S. Public Health Service achieving the rank of Captain (0-6). During his service with the USPHS he was involved primarily with water pollution and other environmental health issues. He served as Chief of the Environmental Services Branch at the Arctic Health Research Center in Fairbanks, Alaska, and was detailed to the EPA as Technical Coordinator for the National Enforcement Investigation Center. He received the USPHS Commissioned Officer Award and EPA Bronze Medal for Commendable Service.

CERTIFICATIONS

Professional Engineer, NY, CO & TN

MEMBERSHIPS AND AFFILIATIONS

Diplomat in the American Academy of Environmental Engineers (AAEE)
AAEE Ad Hoc Committee on Hazardous/Toxic Waste Management
EPA Environmental Engineering Peer Review Panel
Air and Waste Management Association Committee on Ambient Air Monitoring
Water Pollution Control Federation Specialty Conference Committee

EDUCATION

Ph.D. Environmental Health Engineering, California Institute of Technology, 1965.
M.S. Environmental Health, University of Colorado, 1958.
B.S. Civil Engineering, City College of New York, 1955.

PROJECT EXPERIENCE

* Phelps-Dodge, New York, NY
* Goddard Space Flight Center, Greenbelt, MD
* Phillips Petroleum Plants, Bartlesville, OK
* Quaker Oats, Nationwide
* EPA Alternative Remedial Contracting Strategy, Region VII
* Laboratory Director for EPA Superfund Projects
* Laboratory Director for U.S. Army Toxic & Hazardous Materials Agency Project
* Invented and patented EPA Stage II Vapor Recovery Test Procedure

David Siegel

Staff Geologist, Environmental Services

RELEVANT EXPERIENCE

As staff geologist for Professional Service Industries, Inc., (PSI), Mr. Siegel is responsible for conducting Phase I Environmental Site Assessments, asbestos surveys and sampling, soil and groundwater testing and environmental audits. Mr. Siegel has worked on a number of remedial investigations and remediation projects for underground storage tank and solvent sites, prepared feasibility study and remediation plans and installed groundwater monitoring, air sparging and vapor and groundwater extraction wells at contaminated sites. Mr. Siegel has conducted a large numer of Phase I Environmental Site Assessments and several comprehensive asbestos surveys.

CERTIFICATIONS

Registered Environmental Assessor, California
EPA-accredited Asbestos Inspector, Management Planner, Contractor Supervisor, and Project Designer
40-hour Hazardous Waste Worker
8-hour Hazardous Waste Operations Supervisor

EDUCATION

M.S. Geology, Hayward State University, 1988
University of California, Lead Paint Building Assessor
University of California, Groundwater Modeling for Remedial Actions

PROJECT EXPERIENCE

* Bank of America, Remedial Investigation, Remediation System Construction, Installation and Startup, Santa Rosa
* ARCO, Remedial Investigations, Soil Remediation, San Mateo, Daly City, Palo Alto
* Exxon, Remedial Investigations, San Jose and Daly City
* Exxon, Geotechnical and Environmental Investigation, Martinez
* Shell, Offsite Remedial Investigation, Santa Clara
* Unocal, Remedial Investigation and Underground Storage Tank Replacement
* Texaco, Remediation System Installation and Startup, San Francisco
* Icore International, Remedial Investigation and Site Assessent for Solvents
* Investors Thrift, Comprehensive Asbestos Asssesment, San Jose
* Avis Rent A Car, Remedial Investigation and Feasibility Study, San Francisco Airport
* Budget Rent a Car, Remedial Investigations, Oakland and Fremont
* Bank of America, Phase I ESA's, California
* Wells Fargo, Phase I ESA's, California
* Lucky Stores, Phase I ESA and Asbestos Surveys, California
* Navy, Remedial Investigation, Feasibility Study, Remedial Action Plan, Lemoore
* City of Bakersfield, Site Investigation for Pesticides and Hydrocarbons, Bakersfield
* Sagwa Development, Site Investigation for Pesticides and Hydrocarbons, Fremont

Fortner Shopping

10700 MacArthur
Oakland

Augeas Corporation
Groundwater Sampling Field Log

Project Name/ No: Young's Cleaners
Client: _____
Project Manager: C. Conway
Sampler: WD Schroeder
Casing Diameter: 2 inch X 3 inch ____ 4 inch ____ 6 inch ____ Other: ____
Sample Depth (feet): 23.97 = 80%
Depth of Well (feet): 34.20
Depth to Water (feet): 21.42
12.78
-7.99 x 3

Lab I.D.: AMW-1
Date: 3-23-95
Sample Location I.D.: ____
Start TIme: 11:00
1:00
Calculated Purge Vol. (gal.) 23L
Actual Purge Vol. (gal.) 23L

80% Monterey Sinclair

Field Measurements

Time	Cum	Volume (gal.) L	pH (units)	E.C. (umhos/cm)	Temperature Degrees C	Color (visual)	Other
12:30	0	6	6.25	1.48	51.2	Yell/brown	cloudy, no odors
12:37	12	6	6.18	6.99	50.8	"	"
12:46	18	6	6.51	0.56	48.4	"	"
12:52	23	5	6.51	12.20	50.4	"	"

Purge Method

____ 2" Bladder Pump X Bailer (Teflon) ____ Well Wizard ____ Dedicated
____ Submersible Pump ____ Cenetrifugal Pump ____ Dipper ____ Other
____ Pneumatic Displacement Pump

Sample Method

____ 2" Bladder Pump X Bailer (Teflon) ____ Well Wizard ____ Dedicated
____ Surface Sampler ____ Dipper ____ Fultz Pump ____ Other

Well Integrity: Good
Remarks: purged 3 well volumes
Sampled at 100% recovery

Signature: [signature]

Volumes Per Unit Length Selected Well Casing Diameters

Well Casing I.D. (inches)	Volume Per Unit Length Gal/ft	Cubic Ft/ft	L/M	L/Ft
1.5	0.0918	0.0123	1.140	0.3475
2.0	0.1632	0.0218	2.027	0.6178
3.0	0.3672	0.0491	4.560	1.3900
4.0	0.6528	0.0873	8.107	2.4710
6.0	1.4690	0.1963	18.240	5.5600

Conversion Factors

To Convert	Into	Multiply
Ft of Water	Lbs/sq.in.	0.4335
Lbs/Sq. inch	Ft of Water	2.3070
Cubic feet	Gallons	7.4800
Gallons	Liters	3.7850
Feet	Meters	0.30048
Inches	Centimeters	2.5400

Augeas Corporation
Groundwater Sampling Field Log

Lab I.D.: AMW-2
Date: 3-23-95
Sample Location I.D.:
Start Time: 11:00

Project Name/ No: Young's Cleaners
Client:
Project Manager: C. Conway
Sampler: W. Schrader
Casing Diameter: 2 inch ✓ 3 inch ___ 4 inch ___ 6 inch ___ Other: ___
Sample Depth (feet):
Depth of Well (feet): 29.20
Depth to Water (feet): 13.12

Calculated Purge Vol. (gal.) 30 L
Actual Purge Vol. (gal.) 30 L

16.08 x .6178   80% = 16.33 ft.   floaters Ø
9.93 x 3   sinkers Ø   :00

Field Measurements

Time	Cum	Volume (gal.)	pH (units)	E.C. (umhos/cm)	Temperature Degrees C	Color (visual)	Other
3:23	6	6	7.16	17.69	51.1	yellow/Red	no odor
3:28	12	6	7.20	16.59	53.9	"	"
3:32	18	6	7.21	17.21	52.6	"	"
3:38	24	6	7.19	17.61	51.9	"	"
3:40	30	6	7.20	17.61	52.0	"	"

Purge Method

___ 2" Bladder Pump ✓ Bailer (Teflon) ___ Well Wizard ___ Dedicated
___ Submersible Pump ___ Cenetrifugal Pump ___ Dipper ___ Other
___ Pneumatic Displacement Pump

Sample Method

___ 2" Bladder Pump ✓ Bailer (Teflon) ___ Well Wizard ___ Dedicated
___ Surface Sampler ___ Dipper ___ Fultz Pump ___ Other

Well Integrity: Good
Remarks: purged 3 well volumes
Sampled at 100% recovery

Signature: W. Schrader

Volumes Per Unit Length Selected Well Casing Diameters
Volume Per Unit Length

Well Casing I.D. (inches)	Gal/ft	Cubic Ft/ft	L/M	L/Ft
1.5	0.0918	0.0123	1.140	0.3475
2.0	0.1632	0.0218	2.027	0.6178
3.0	0.3672	0.0491	4.560	1.3900
4.0	0.6528	0.0873	8.107	2.4710
6.0	1.4690	0.1963	18.240	5.5600

Conversion Factors

To Convert	Into	Mulitply
Ft. of Water	Lbs/sq.in.	0.4335
Lbs/Sq. inch	Ft. of Water	2.3070
Cubic feet Gallons		7.4800
Gallons	Liters	3.7850
Feet	Meters	0.30048
Inches	Centimeters	2.5400

Augeas Corporation
Groundwater Sampling Field Log

Project Name/ No: Young's Cleaners
Client:
Project Manager: C. Conway
Sampler: W. Schrader
Casing Diameter: 2 inch X 3 inch 4 inch ___ 6 inch ___ Other: ___
Sample Depth (feet): 15.60 = 80% 13.21
Depth of Well (feet): 29.18
Depth to Water (feet): 12.20
16.98 x .0178
10 x 3

3:20

Lab I.D.: AMW-3
Date: 3-23-95
Sample Location I.D.:
Start TIme: 11:00
Calculated Purge Vol. (gal.) 30 Liters
Actual Purge Vol. (gal.) 30 L
80% = 15.60
Floaters ϕ
Sinkers ϕ

Field Measurements

Time	Cum	Volume ~~(gal.)~~ L	pH (units)	E.C. (umhos/cm)	Temperature Degrees C	Color (visual)	Other
2:50	6	6	6.91	16.74	51.6	yellow/Br	no odor
2:53	12	6	7.05	17.98	54.4	"	"
2:58	18	6	7.10	17.60	53.6	"	"
3:05	24	6	7.22	16.6	52.7	"	"
3.11	30	6	7.19	16.06	53.4	"	"

Purge Method

___ 2" Bladder Pump X Bailer (Teflon) ___ Well Wizard ___ Dedicated
___ Submersible Pump ___ Cenetrifugal Pump ___ Dipper ___ Other
___ Pneumatic Displacement Pump

Sample Method

___ 2" Bladder Pump X Bailer (Teflon) ___ Well Wizard ___ Dedicated
___ Surface Sampler ___ Dipper ___ Fultz Pump ___ Other

Well Integrity: Good
Remarks: Sampled at 80% recovery
3 well volumes purged

Signature: W Schrader

Volumes Per Unit Length Selected Well Casing Diameters
Volume Per Unit Length

Well Casing I.D. (inches)	Gal/ft	Cubic Ft/ft	L/M	L/ft
1.5	0.0918	0.0123	1.140	0.3475
2.0	0.1632	0.0218	2.027	0.6178
3.0	0.3672	0.0491	4.560	1.3900
4.0	0.6528	0.0873	8.107	2.4710
6.0	1.4690	0.1963	18.240	5.5600

Conversion Factors

To Convert	Into	Mulitply
Ft. of Water	Lbs/sq.in.	0.4335
Lbs/Sq. inch	Ft. of Water	2.3070
Cubic feet Gallons		7.4800
Gallons	Liters	3.7850
Feet	Meters	0.30048
Inches	Centimeters	2.5400

Augeas Corporation
Groundwater Sampling Field Log

Project Name/ No: Young's Cleaners
Client: _____
Project Manager: C. Conway
Sampler: W. Schrader
Casing Diameter: 2 inch ✓ 3 inch _____ 4 inch _____ 6 inch _____ Other: _____
Sample Depth (feet): 13.51
Depth of Well (feet): 25.10
Depth to Water (feet): 13.06
12.04
7.43 x 6

Lab I.D.: AMW-4
Date: 3-24-95
Sample Location I.D.: _____
Start TIme: 8:00
Calculated Purge Vol. (gal.) 44 L (develop)
Actual Purge Vol. (gal.) 60 L
floater Ø
sinker Ø

Field Measurements

Time	Cum	Volume (gal.) L	pH (units)	E.C. (umhos/cm)	Temperature Degrees C	Color (visual)	Other
8:22	10	10	7.62	18.89	53.2	Dk Brown	Very Silty no odor
8:30	20	10	7.74	18.12	48.3	"	"
8:37	30	10	7.84	17.91	48.5	"	"
8:43	40	10	7.91	18.02	49.4	"	"
8:48	50	10	7.91	18.05	50.1	"	"
8:53	60	10	7.96	1789	50.9	clear	

Purge Method

_____ 2" Bladder Pump _____ Bailer (Teflon) ____ Well Wizard ____ Dedicated
_____ Submersible Pump _____ Cenetrifugal Pump ____ Dipper ____ Other
_____ Pneumatic Displacement Pump

Sample Method

_____ 2" Bladder Pump _____ Bailer (Teflon) ____ Well Wizard ____ Dedicated
_____ Surface Sampler _____ Dipper ____ Fultz Pump ____ Other

Well Integrity: Good
Remarks: 6 well volumes purged (and more)
Sampled at 80% Recovery

Signature: WJS

Volumes Per Unit Length Selected Well Casing Diameters

Well Casing I.D. (inches)	Volume Per Unit Length Gal/ft	Cubic Ft/ft	L/M	L/Ft
1.5	0.0918	0.0123	1.140	0.3475
2.0	0.1632	0.0218	2.027	0.6178
3.0	0.3672	0.0491	4.560	1.3900
4.0	0.6528	0.0873	8.107	2.4710
6.0	1.4690	0.1963	18.240	5.5600

Conversion Factors

To Convert	Into	Multiply
Ft. of Water	Lbs/sq.in.	0.4335
Lbs/Sq. inch	Ft. of Water	2.3070
Cubic feet	Gallons	7.4800
Gallons	Liters	3.7850
Feet	Meters	0.30048
Inches	Centimeters	2.5400

Augeas Corporation
Groundwater Sampling Field Log

Project Name/ No: Young's Cleaners
Client:
Project Manager: C. Conway
Sampler: W. Schroeder
Casing Diameter: 2 inch ✓ 3 inch ___ 4 inch ___ 6 inch ___ Other: ___
Sample Depth (feet):
Depth of Well (feet): 30.30
Depth to Water (feet): 13.98
16.32 x .6178
10.0 x 6

Lab I.D.: AMW-5
Date: 3-24-95
Sample Location I.D.:
Start TIme: 8:00
Calculated Purge Vol. (gal.) 60 L
Actual Purge Vol. (gal.) 60 L
Floaters Ø
Sinkers Ø
10:10

Field Measurements

Time	Cum	Volume (gal.) L	pH (units)	E.C. x1000 (umhos/cm)	Temperature Degrees C	Color (visual)	Other
9:26	10	10	7.87	2.38	47.9	lt. yellow/Br	No Odor
9:32	20	10	8.05	2.50	51.9	cleaner	"
9:39	30	10	8.04	2.34	51.0	darker	"
9:44	40	10	8.14	2.52	52.9	"	No odor
9:52	50	10	7.96	2.57	51.2	"	"
10:04	60	10	8.15	2.43	49.8	"	" silty

Purge Method

___ 2" Bladder Pump ✓ Bailer (Teflon) ___ Well Wizard ___ Dedicated
___ Submersible Pump ___ Cenetrifugal Pump ___ Dipper ___ Other
___ Pneumatic Displacement Pump

Sample Method

___ 2" Bladder Pump ✓ Bailer (Teflon) ___ Well Wizard ___ Dedicated
___ Surface Sampler ___ Dipper ___ Fultz Pump ___ Other

Well Integrity: Good
Remarks: purged 6 well volumes
Sampled at 100% recovery

Signature: [signature]

Volumes Per Unit Length Selected Well Casing Diameters
Volume Per Unit Length

Well Casing I.D. (inches)	Gal/ft	Cubic Ft/ft	L/M	L/ft
1.5	0.0918	0.0123	1.140	0.3475
2.0	0.1632	0.0218	2.027	0.6178
3.0	0.3672	0.0491	4.560	1.3900
4.0	0.6528	0.0873	8.107	2.4710
6.0	1.4690	0.1963	18.240	5.5600

Conversion Factors

To Convert	Into	Mulitply
Ft. of Water	Lbs/sq.in.	0.4335
Lbs/Sq. inch	Ft. of Water	2.3070
Cubic feet Gallons		7.4800
Gallons	Liters	3.7850
Feet	Meters	0.30048
Inches	Centimeters	2.5400

Augeas Corporation
Groundwater Sampling Field Log

Project Name/ No: ~~Conway~~ Young's
Client:
Project Manager: C. Conway
Sampler: W. Schrader
Casing Diameter: 2 inch 2 3 inch ____ 4 inch ____ 6 inch ____ Other: ____
Sample Depth (feet): ____
Depth of Well (feet): 52.10
Depth to Water (feet): 30.02
Column 22.08
volu 13.64 x 3

Lab I.D.: MW-6
Date: 3-24-95
Sample Location I.D.: ____
Start TIme: 12:50
Calculated Purge Vol. (gal.) 40.L
Actual Purge Vol. (gal.) 40L

1.25

Field Measurements

Time	Cum	Volume (gal.)L	pH (units)	E.C. (umhos/cm)	Temperature Degrees C	Color (visual)	Other
12:57	10	10	10.81	1.42	60.2	lt. yellow	no odor
1:03	20	10	5.92	1.36	61.5	↓	↓
1:11	30	10	5.91	1.23	52.0		
1:21	40	10	5.91	1.34	56.5		

Purge Method

____ 2" Bladder Pump ✓ Bailer (Teflon) ____ Well Wizard ____ Dedicated
____ Submersible Pump ____ Cenetrifugal Pump ____ Dipper ____ Other
____ Pneumatic Displacement Pump

Sample Method

____ 2" Bladder Pump ✓ Bailer (Teflon) ____ Well Wizard ____ Dedicated
____ Surface Sampler ____ Dipper ____ Fultz Pump ____ Other

Well Integrity: Well cap broken - Standing H2O in well / Integrity = OK
Remarks: 3 well volumes purged
Sampled at 100% recovery

Signature: W. Schrader

Volumes Per Unit Length Selected Well Casing Diameters
Volume Per Unit Length

Well Casing I.D. (inches)	Gal/ft	Cubic Ft/ft	L/M	L/Ft
1.5	0.0918	0.0123	1.140	0.3475
2.0	0.1632	0.0218	2.027	0.6178
3.0	0.3672	0.0491	4.560	1.3900
4.0	0.6528	0.0873	8.107	2.4710
6.0	1.4690	0.1963	18.240	5.5600

Conversion Factors

To Convert	Into	Multiply
Ft. of Water	Lbs/sq.in.	0.4335
Lbs/Sq. inch	Ft. of Water	2.3070
Cubic feet	Gallons	7.4800
Gallons	Liters	3.7850
Feet	Meters	0.30048
Inches	Centimeters	2.5400

Augeas Corporation
Groundwater Sampling Field Log

Project Name/ No: Young's Cleaners
Client:
Project Manager: C. Conway
Sampler: W. Schrader
Casing Diameter: 2 inch X 3 inch ____ 4 inch ____ 6 inch ____ Other: ____
Sample Depth (feet):
Depth of Well (feet): 36.82
Depth to Water (feet): 15.52
2:10

Lab I.D.: MW-7
Date: 3-24-95
Sample Location I.D.:
Start Time: 1:45

Calculated Purge Vol. (gal.) 40 L
Actual Purge Vol. (gal.) 40 L
Floaters Ø Sinkers Ø
Strong odor Broken Sheen

Field Measurements

Time	Cum	Volume (gal.) L	pH (units)	E.C. (umhos/cm)	Temperature Degrees C	Color (visual)	Other
1:46	10	10	9.23	0.100	72.8	Clear	strong gas/diesel odor
1:52	20	10	8.76	0.59	73.9	↓	↓ broken sheen
1:58	30	10	8.75	0.61	72.1	↓	↓
2:04	40	10	9.12	0.61	72.1		

Purge Method

____ 2" Bladder Pump X Bailer (Teflon) ____ Well Wizard ____ Dedicated
____ Submersible Pump ____ Cenetrifugal Pump ____ Dipper ____ Other
____ Pneumatic Displacement Pump

Sample Method

____ 2" Bladder Pump X Bailer (Teflon) ____ Well Wizard ____ Dedicated
____ Surface Sampler ____ Dipper ____ Fultz Pump ____ Other

Well Integrity: good
Remarks: long black 1/2" diameter pipe in well - pulled out to monitor, purged 3 well volumes, sampled at 100% recovery.

Signature: W. Schrader

Volumes Per Unit Length Selected Well Casing Diameters
Volume Per Unit Length

Well Casing I.D. (inches)	Gal/ft	Cubic Ft/ft	L/M	L/ft
1.5	0.0918	0.0123	1.140	0.3475
2.0	0.1632	0.0218	2.027	0.6178
3.0	0.3672	0.0491	4.560	1.3900
4.0	0.6528	0.0873	8.107	2.4710
6.0	1.4690	0.1963	18.240	5.5600

Conversion Factors

To Convert	Into	Mulitply
Ft. of Water	Lbs/sq.in.	0.4335
Lbs/Sq. inch	Ft. of Water	2.3070
Cubic feet	Gallons	7.4800
Gallons	Liters	3.7850
Feet	Meters	0.30048
Inches	Centimeters	2.5400

Augeas Corporation
Groundwater Sampling Field Log

Project Name/ No: Young's Cleaners
Client:
Project Manager: C. Conway
Sampler: W. Schrader
Casing Diameter: 2 inch ___ 3 inch ___ 4 inch ___ 6 inch ___ Other: ___
Sample Depth (feet): 22.75 = 80% (21.70)
Depth of Well (feet): 28.48
Depth to Water (feet): 21.32

Lab I.D.: WGR-MW-2
Date: 3-23-95
Sample Location I.D.:
Start Time: 11:00

Calculated Purge Vol. (gal.) 53 L
Actual Purge Vol. (gal.) 53 L

7.16 x 2.4712   80% = 7.16 x .8 - 28.48   22.75
column vol.   17.69 x 3
2:15

Field Measurements

Time	Cum	Volume (gal.) L	pH (units)	E.C. (umhos/cm)	Temperature Degrees C	Color (visual)	Other
1:24	10	10	6.86	2.51	51.6	Sooty, clear	H_2S odor
1:30	20	10	6.73	3.99	51.8	clearer	"
1:38	30	10	6.79	3.93	54.8	" yellowish	"
1:51	40	10	6.93	10.98 ~~6.70~~ +100	53.9		
2:00	53	13	6.95	10.8 +100	62		

Purge Method

___ 2" Bladder Pump ___ Bailer (Teflon) ___ Well Wizard ___ Dedicated
___ Submersible Pump ___ Cenetrifugal Pump ___ Dipper ___ Other
___ Pneumatic Displacement Pump

Sample Method

___ 2" Bladder Pump ___ Bailer (Teflon) ___ Well Wizard ___ Dedicated
___ Surface Sampler ___ Dipper ___ Fultz Pump ___ Other

Well Integrity: Okay, well was in standing H_2O, lid was not well
Remarks: sealed, Air Bubbles were escaping thru standing H_2O
chip on side of well casing allows surface run-off into well
sampled at 80% : 3 well volumes purged
Signature: W. Schrader

Volumes Per Unit Length Selected Well Casing Diameters
Volume Per Unit Length

Well Casing I.D. (inches)	Gal/ft	Cubic Ft/ft	L/M	L/Ft
1.5	0.0918	0.0123	1.140	0.3475
2.0	0.1632	0.0218	2.027	0.6178
3.0	0.3672	0.0491	4.560	1.3900
4.0	0.6528	0.0873	8.107	2.4710
6.0	1.4690	0.1963	18.240	5.5600

Conversion Factors

To Convert	Into	Mulitply
Ft. of Water	Lbs/sq.in.	0.4335
Lbs/Sq. inch	Ft. of Water	2.3070
Cubic feet	Gallons	7.4800
Gallons	Liters	3.7850
Feet	Meters	0.30048
Inches	Centimeters	2.5400

Augeas Corporation
Groundwater Sampling Field Log

Project Name/ No: Young's
Client:
Project Manager: C. Conway
Sampler: W. Schroder
Casing Diameter: 2 inch ____ 3 inch ____ ~~4~~ inch ✓ 6 inch ____ Other: ____
Sample Depth (feet):
Depth of Well (feet): 27.00
Depth to Water (feet): 12.60
14.4 x 2.4710
35

Lab I.D.: WGR-MW-3
Date: 3-24-95
Sample Location I.D.:
Start TIme: 2:20
Calculated Purge Vol. (gal.) 100 L
Actual Purge Vol. (gal.) 100 L

floaters Ø
sinkers Ø

3:15

Field Measurements

Time	Cum	Volume (gal.)	pH (units)	E.C. (umhos/cm)	Temperature Degrees C	Color (visual)	Other
2:25	20	20	8.86	0.52	86.5	Clear	no odor
2:36	40	20	8.92	0.52	82.6		or
2:45	60	20	8.92	0.51	72.3		sheen
2:58	80	20	8.19	0.52	89.1		
3:09	100	20	8.85	0.52	84.9		
[redacted]							

Purge Method

____ 2" Bladder Pump ✓ Bailer (Teflon) ____ Well Wizard ____ Dedicated
____ Submersible Pump ____ Cenetrifugal Pump ____ Dipper ____ Other
____ Pneumatic Displacement Pump

Sample Method

____ 2" Bladder Pump ✓ Bailer (Teflon) ____ Well Wizard ____ Dedicated
____ Surface Sampler ____ Dipper ____ Fultz Pump ____ Other

Well Integrity: Good
Remarks: Black Tube in well (to ventilate?) purged 3 well volumes, sampled at 100% recovery
Signature: WJS

Volumes Per Unit Length Selected Well Casing Diameters

Well Casing I.D. (inches)	Volume Per Unit Length Gal/ft	Cubic Ft/ft	L/M	L/Ft
1.5	0.0918	0.0123	1.140	0.3475
2.0	0.1632	0.0218	2.027	0.6178
3.0	0.3672	0.0491	4.560	1.3900
4.0	0.6528	0.0873	8.107	2.4710
6.0	1.4690	0.1963	18.240	5.5600

Conversion Factors

To Convert	Into	Multiply
Ft. of Water	Lbs/sq.in.	0.4335
Lbs/Sq. inch	Ft. of Water	2.3070
Cubic feet	Gallons	7.4800
Gallons	Liters	3.7850
Feet	Meters	0.30048
Inches	Centimeters	2.5400

Augeas Corporation
Groundwater Sampling Field Log

Project Name/ No: Young's Cleaners
Client:
Project Manager: C. Conway
Sampler: W. Schrader
Casing Diameter: 2 inch ____ 3 inch ____ X 4 inch ____ 6 inch ____ Other: ____
Sample Depth (feet): ____
Depth of Well (feet): 45.10
Depth to Water (feet): 24.20
20.9 X

Lab I.D.: WGR-MW-4
Date: 3-24-95
Sample Location I.D.: ____
Start TIme: 10:35
Calculated Purge Vol. (gal.) 150 L
Actual Purge Vol. (gal.) 150 L
floaters 0
sinkers 0

Field Measurements

Time	Cum	Volume (gal.) L	pH (units)	E.C. (umhos/cm)	Temperature Degrees C	Color (visual)	Other
~~10:31~~	20	20	8.48	2.42	60.1	clear	no odor
10:50	~~40~~ 40	20	9.21	2.41	59.2	"	"
11:05	60	20	9.20	2.45	56.3	"	"
11:14	80	20	8.49	2.41	52.1	darker	"
11:27	100	20	8.49	2.46	53.1	"	"
11:38	120	20	8.48	2.42	53.5	lighter	"
11:56	150	30	8.49	2.40	53.0		

Purge Method

____ 2" Bladder Pump ____ Bailer (Teflon) ____ Well Wizard ____ Dedicated
____ Submersible Pump ____ Cenetrifugal Pump ____ Dipper ____ Other
____ Pneumatic Displacement Pump

Sample Method

____ 2" Bladder Pump ____ Bailer (Teflon) ____ Well Wizard ____ Dedicated
____ Surface Sampler ____ Dipper ____ Fultz Pump ____ Other

Well Integrity: Good
Remarks: purged 3 well volumes
Sampled at 100% integrity

Signature: W. Schrader

Volumes Per Unit Length Selected Well Casing Diameters

Well Casing I.D. (inches)	Volume Per Unit Length Gal/ft	Cubic Ft/ft	L/M	L/Ft
1.5	0.0918	0.0123	1.140	0.3475
2.0	0.1632	0.0218	2.027	0.6178
3.0	0.3672	0.0491	4.560	1.3900
4.0	0.6528	0.0873	8.107	2.4710
6.0	1.4690	0.1963	18.240	5.5600

Conversion Factors

To Convert	Into	Multiply
Ft. of Water	Lbs/sq.in.	0.4335
Lbs/Sq. inch	Ft. of Water	2.3070
Cubic feet	Gallons	7.4800
Gallons	Liters	3.7850
Feet	Meters	0.30048
Inches	Centimeters	2.5400

52.83
51.13
1.70 ft over 143 ft

.0119 ft/ft

52.83
52.21
.61 ft

$\left(\frac{1\text{ ft}}{.0119\text{ ft}}\right)(.61\text{ ft}) = 51\text{ ft}$

52.83
52.21
.62 ft
over 45 ft

$\left(\frac{.62}{45}\right) = .0138\text{ ft/ft}$, WPST

52.83
52.40
.43 ft

$\left(\frac{1\text{ ft}}{.0138\text{ ft}}\right)(.43\text{ ft})$

52.60
52.40
.20

52.83
52.21
.62 ft

45 ft = .0138 ft/ft, use shallow aquifer

52.83
52.4
.43

$\left(\frac{1\,cfs}{.0138\,ft}\right)(.43\,ft)$

Table 3
Summary of Groundwater Analytical Results

Youngs Cleaners
10700 MacArthur Boulevard
Oakland, CA

(all results expressed in µg/L except where noted)

Sample ID	Date	TPHs[2] No MCL listed	1,1-DCE[3] MCL= 6 µg/L	c-1,2-DCE MCL= 6 µg/L	t-1,2-DCE MCL= 10µg/L	TCE[5] MCL= 5 µg/L	c-1,3-DCP[6] No MCL listed	1,1,2-TCA[7] MCL= 32 µg/L	PCE[8] MCL= 5 µg/L
WGR MW-2 (1)	2/10/94	<50	ND[10]	ND	ND	ND	ND	ND	ND
	3/23/95	NA	NA	ND	ND	ND	ND	ND	ND
WGR MW3 (1)	2/10/94	NA[9]	<0.5	ND	ND	ND	ND	ND	ND
	3/24/95	NA	NA	ND	ND	ND	ND	ND	7.8
WGR-MW-4	3/24/95	NA	ND	ND	ND	ND	ND	ND	ND
AMW-1	10/04/94	ND	ND	0.5	ND	ND	ND	ND	ND
	3/23/95	NA	NA	0.5	ND	ND	ND	ND	ND
AMW-2	10/04/94	200	8	110	50	320	4.2	ND	28,000
	10/18/94	<50	<0.5		ND	ND	ND	ND	18,000
	11/08/94	NA	<0.5		ND	ND	ND	ND	35,000
	3/23/95	NA	NA	ND	ND	ND	ND	ND	13,000
AMW-3	11/28/94	NA	ND		ND	ND	ND	ND	22
	3/23/95	NA	ND	ND	ND	ND	ND	ND	45
B-4, grab	10/07/94	NA	4.2	130	19	180	11	14	11,000
B-5, grab	11/03/94	NA	ND	ND	ND	ND	ND	ND	1,000
B-6, grab	11/03/94	NA	ND	ND	ND	ND	ND	ND	870
B-7, grab	11/23/94	NA	ND	ND	ND	ND	ND	ND	19
B-8, grab	3/23/95	NA	ND	ND	ND	ND	ND	ND	1.1
AMW-4, grab	3/22/95	NA	ND	ND	ND	ND	ND	ND	33
AMW-5, grab	3/22/95	NA	ND	ND	ND	ND	ND	ND	1.1
WGR-MW-4	3/24/95	NA	ND	ND	ND	ND	ND	ND	21
MW-6	3/24/95	NA	ND	ND	ND	ND	ND	ND	2,000
MW-7	3/24/95	NA	ND	ND	ND	ND	ND	ND	21

(1) Wells WGR MW-2 and WGR MW-3 were analyzed for EPA 8240 compounds; none were detected
(2) TPHs =Total Petroleum Hydrocarbons as stoddard solvent (3) 1,1-Dichloroethene
(4) total 1,2-Dichloroethene (5) Trichloroethene (6) cis 1,2-Dichloropropene
(7) 1,1,2-Trichloroethane (8) Tetrachloroethene (9) Not Analyzed
(10) Not Detectable at laboratory detection limits. Detection limits vary with analyte and concentration.

Table 2

Summary of Soil Analytical Results

Young's Cleaners
10700 MacArthur Boulevard
Oakland, CA

(all results expressed in µg /Kg except where noted)

Sample Identification	Sample Matrix	Sample Date	Analysis Date	Gasoline (1)	Stoddard Solvent (2)	Tetra-Chloroethene (PCE) (3)	Benzene (4)	Toluene (4)	Ethyl-Benzene (4)	Xylenes (5)
B-2 - 6'	Soil	9-12-94	9-16-94	ND	ND	ND	ND	6	ND	ND
B-2 - 11'	Soil	9-12-94	9-16-94	ND	ND	ND	ND	ND	ND	ND
B-2 - 16'	Soil	9-12-94	9-16-94	ND	ND	ND	ND	ND	ND	ND
B-2 - 21'	Soil	9-12-94	9-16-94	ND	ND	ND	ND	ND	ND	ND
B-2 - 24'	Soil	9-12-94	9-19-94	ND	ND	ND	ND	ND	ND	ND
B-3 - 6'	Soil	10-7-94	10-13-94	NA	ND	15	ND	ND	ND	ND
B-3 - 13'	Soil	10-7-94	10-13-94	NA	ND	ND	ND	ND	ND	ND
B-3 - 16'	Soil	10-7-94	10-13-94	NA	ND	12	ND	ND	ND	ND
B-3 - 21'	Soil	10-7-94	10-13-94	NA	ND	27	ND	ND	ND	ND
B-4 - 5.5'	Soil	10-7-94	10-13-94	NA	ND	1,600	ND	7	ND	ND
B-4 - 11'	Soil	10-7-94	10-13-94	NA	ND	70	ND	ND	ND	ND
B-4 - 16'	Soil	10-7-94	10-13-94	NA	ND	100	ND	10	ND	ND
B-4 - 21'	Soil	10-7-94	10-13-94	NA	ND	30	ND	ND	ND	ND
B-5 - 6'	Soil	11-3-94	11-10-94	NA	NA	1600	NA	NA	NA	NA
B5 - 10.5'	Soil	11-3-94	11-9-94	NA	NA	450	NA	NA	NA	NA
B5 - 15.5'	Soil	11-3-94	11-9-94	NA	NA	440	NA	NA	NA	NA
B5 - 20.5'	Soil	11-3-94	11-9-94	NA	NA	ND	NA	NA	NA	NA
B5 - 25.5'	Soil	11-3-94	11-10-94	NA	NA	ND	NA	NA	NA	NA

Continued

(1): Gasoline by EPA method 8015/5030. Sample Quantification Limit (SQL) of 0.5 mg/Kg.
(2): Stoddard Solvent by EPA method 8015 modified. SQL of 1.0 mg/Kg.
(3): Tetrachloroethene by EPA SW-846 methods 5030 /8010. SQL of 5 µg/Kg.
(4): By method 8020. SQL of 5 µg/Kg.
(5) : By method 8020. SQL of 10 µg/Kg.
ND: Not detected at the Sample Quantification Limit.
NA: Not analyzed for this parameter.

Table 2

Summary of Soil Analytical Results

Young's Cleaners
10700 MacArthur Boulevard
Oakland, CA

(all results expressed in µg /Kg except where noted)

Sample Identification	Sample Matrix	Sample Date	Analysis Date	Gasoline (1)	Stoddard Solvent (2)	Tetra-Chloroethene (PCE) (3)	Benzene (4)	Toluene (4)	Ethyl-Benzene (4)	Xylenes (5)
B6 - 10.5'	Soil	11-3-94	11-10-94	NA	NA	5000	NA	NA	NA	NA
B6 - 15'	Soil	11-3-94	11-10-94	NA	NA	590	NA	NA	NA	NA
B6 - 20.5'	Soil	11-3-94	11-10-94	NA	NA	ND	NA	NA	NA	NA
B6 - 25.5'	Soil	11-3-94	11-10-94	NA	NA	ND	NA	NA	NA	NA
B7 - 10.5'	Soil	11-30-94	11-30-94	NA	NA	38	NA	NA	NA	NA
B7 - 15.5	Soil	11-30-94	11-30-94	NA	NA	60	NA	NA	NA	NA
B7 - 20.5'	Soil	11-30-94	11-30-94	NA	NA	ND	NA	NA	NA	NA
B7 - 25.5'	Soil	11-30-94	11-30-94	NA	NA	ND	NA	NA	NA	NA
AMW-1-4'	Soil	9-12-94	9-15-94	ND	ND	ND	ND	ND	ND	ND
AMW-1-6'	Soil	9-12-94	9-15-94	ND	ND	ND	ND	ND	ND	ND
AMW-1-11'	Soil	9-12-94	9-15-94	ND	ND	ND	ND	ND	ND	ND
AMW-1-16'	Soil	9-12-94	9-15-94	ND	ND	ND	ND	6	ND	18
AMW-1-21'	Soil	9-12-94	9-15-94	ND	ND	ND	ND	6	ND	ND
AMW-1-26'	Soil	9-12-94	9-15-94	ND	ND	ND	ND	ND	ND	ND
AMW-1-31'	Soil	9-12-94	9-15-94	ND	ND	ND	ND	ND	ND	ND
AMW-1-34'	Soil	9-12-94	9-15-94	ND	ND	ND	ND	ND	ND	ND
AMW-2-10'	Soil	9-30-94	10-6-94	NA	ND	22,000	ND	ND	ND	ND
AMW-2-15'	Soil	9-30-94	10-6-94	NA	ND	90,000	ND	ND	ND	ND
AMW-2-20'	Soil	9-30-94	10-6-94	NA	ND	400	ND	ND	ND	ND
AMW-2-25'	Soil	9-30-94	10-6-94	NA	ND	30	ND	ND	ND	ND

(1): Gasoline by EPA method 8015/5030. Sample Quantification Limit (SQL) of 0.5 mg/Kg.
(2): Stoddard Solvent by EPA method 8015 modified SQL of 1.0 mg/Kg.
(3): Tetrachloroethene by EPA SW-846 methods 5030 /8010. SQL of 5 µg/Kg.
(4): By method 8020. SQL of 5 µg/Kg.
(5) : By method 8020. SQL of 10 µg/Kg.
ND: Not detected at the Sample Quantification Limit.
NA: Not analyzed for this parameter.

Table 2

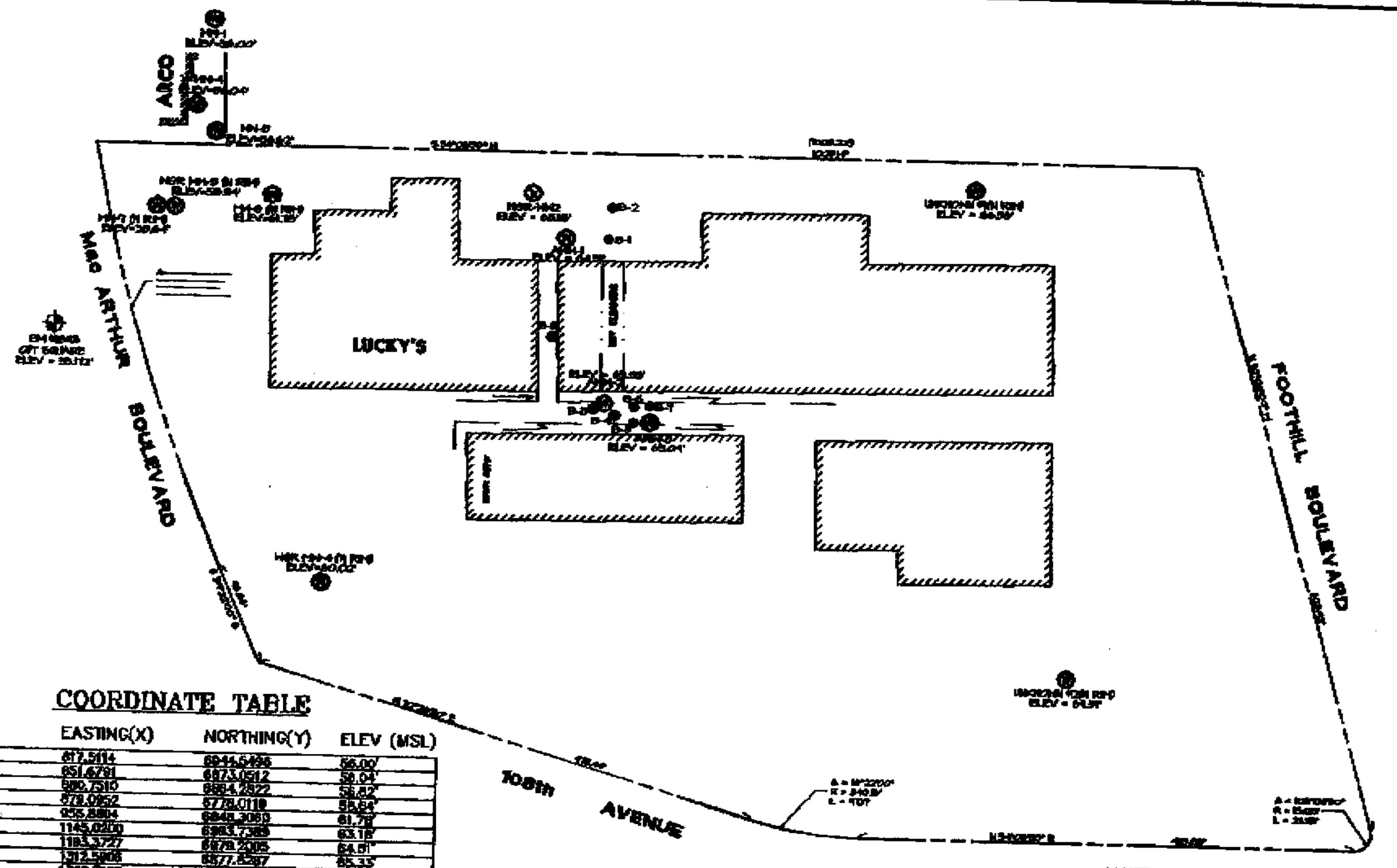
Summary of Soil Analytical Results

Young's Cleaners
10700 MacArthur Boulevard
Oakland, CA

(all results expressed in µg /Kg except where noted)

Sample Identification	Sample Matrix	Sample Date	Analysis Date	Gasoline (1)	Stoddard Solvent (2)	Tetra-Chloroethene (PCE) (3)	Benzene (4)	Toluene (4)	Ethyl-Benzene (4)	Xylenes (5)
AMW-3-5.5'	Soil	11-18-94	11-21-94	NA	NA	6	NA	NA	NA	NA
AMW-3-10'	Soil	11-18-94	11-21-94	NA	NA	390	NA	NA	NA	NA
AMW-3-15.5'	Soil	11-18-94	11-21-94	NA	NA	59	NA	NA	NA	NA
AMW-3-20.5'	Soil	11-18-94	11-21-94	NA	NA	820	NA	NA	NA	NA
AMW-3-25.5'	Soil	11-18-94	11-21-94	NA	NA	1400	NA	NA	NA	NA
AMW-4, 5.5'-6'	Soil	3-22-95	3-23-95	NA	NA	870	NA	NA	NA	NA
AMW-4, 10.5-11	Soil	3-22-95	3-23-95	NA	NA	13	NA	NA	NA	NA
AMW-4, 15.5-16	Soil	3-22-95	3-23-95	NA	NA	7.5	NA	NA	NA	NA
AMW-4, 20.5'-21'	Soil	3-22-95	3-23-95	NA	NA	5.3	NA	NA	NA	NA
AMW-4, 25.5'-26'	Soil	3-22-95	3-23-95	NA	NA	<0.5	NA	NA	NA	NA
AMW-5, 5.5'-6'	Soil	3-22-95	3-23-95	NA	NA	1.1	NA	NA	NA	NA
AMW-5, 10.5-11	Soil	3-22-95	3-23-95	NA	NA	<0.5	NA	NA	NA	NA
AMW-5, 15.5-16	Soil	3-22-95	3-23-95	NA	NA	<0.5	NA	NA	NA	NA
AMW-5, 20.5'-21'	Soil	3-22-95	3-23-95	NA	NA	<0.5	NA	NA	NA	NA
AMW-5, 25.5'-26'	Soil	3-22-95	3-23-95	NA	NA	<0.5	NA	NA	NA	NA
AMW-5, 30.5'-31'	Soil	3-22-95	3-23-95	NA	NA	<0.5	NA	NA	NA	NA

(1): Gasoline by EPA method 8015/5030. Sample Quantification Limit (SQL) of 0.5 mg/Kg.
(2): Stoddard Solvent by EPA method 8015 modified SQL of 1.0 mg/Kg.
(3): Tetrachloroethene by EPA SW-846 methods 5030 /8010. SQL of 5 µg/Kg.
(4): By method 8020. SQL of 5 µg/Kg.
(5) : By method 8020. SQL of 10 µg/Kg.
ND: Not detected at the Sample Quantification Limit.
NA: Not analyzed for this parameter.



COORDINATE TABLE

WELL ID	EASTING(X)	NORTHING(Y)	ELEV (MSL)
MW-1	617.5114	6944.5496	56.00'
MW-4	651.6791	6873.0512	58.04'
MW-3	980.7510	6884.2522	58.82'
MW-7 (N RIM)	578.0952	6778.0118	55.84'
MW-6 (N RIM)	955.8804	6848.3069	61.78'
WGR-MW2	1145.0200	6983.7389	63.18'
AMW-1	1183.3727	6878.2005	64.61'
AMW-2	1312.5906	6877.6287	65.33'
AMW-3	1306.7127	6888.9413	65.09'
UNKNOWN #1(N RIM)	1484.9458	7240.1577	68.56'
UNKNOWN #2(N RIM)	1802.8784	6931.7672	69.37'
B-1	1225.0646	7001.6263	N/A
B-2	1210.4547	7026.7806	N/A
B-3	1307.9199	6867.9305	N/A
B-4	1326.8757	6874.8907	N/A
B-5	1344.7276	6879.8446	N/A
B-6	1338.1303	6897.3511	N/A
B-7	1547.5806	6901.0189	N/A
B-8	1231.2946	6886.7060	N/A
WGR MW-3 (N RIM)	892.6101	6787.3101	58.34'
WGR MW-4 (N RIM)	1206.7733	6590.3861	60.02'

GRAPHIC SCALE

(IN FEET)
1 inch = 100 ft.

NOTE: BOUNDARY WAS OBTAINED FROM RECORD DATA.

NOTE: BENCHMARK
CUT SQUARE IN CURB RETURN AT THE SOUTHEAST CORNER OF 107th AVE AND MacARTHUR BLVD.
ELEV = 55.172' MSL (USGS 1929)

NOTE: TO OBTAIN ELEVATION PER CITY DATUM, SUBTRACT 3.00 FEET FROM USGS ELEVATION.

MONITORING WELLS
FOOTHILL SQUARE
AUGEAS CORPORATION
OAKLAND ALAMEDA CALIFORNIA

BLOOTER CONSULTING INC.

SHEET 1 OF 1
)89-02

BENCHMARK

CUT SQUARE IN CURB RETURN AT THE SOUTHEAST CORNER OF 107th AVE AND MaCARTHUR BLVD.

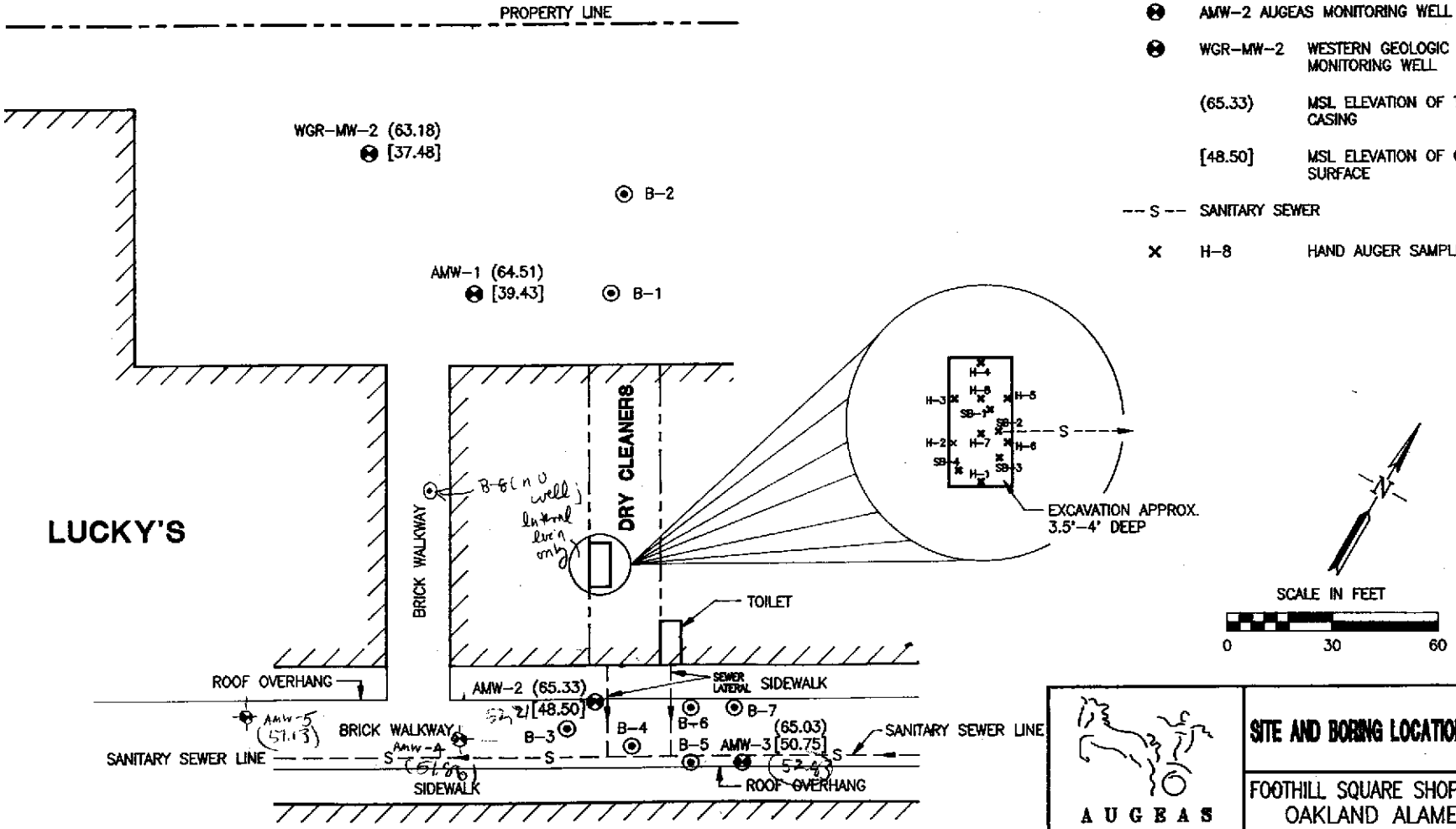
ELEV = 55.172' MSL (USGS 1929)
TO OBTAIN ELEVATION PER CITY DATUM.
SUBTRACT 300 FEET FROM USGS ELEVATION.

NOTE

ALL ELEVATIONS ARE AT MARK AT TOP OF PVC CASING.

LEGEND

⊙		AUGEAS SOIL BORING
⊗		AMW-2 AUGEAS MONITORING WELL
⊗	WGR-MW-2	WESTERN GEOLOGIC RESOURCES MONITORING WELL
	(65.33)	MSL ELEVATION OF TOP OF PVC CASING
	[48.50]	MSL ELEVATION OF GROUNDWATER SURFACE
--S--		SANITARY SEWER
×	H-8	HAND AUGER SAMPLE



AUGEAS
CORPORATION
HALF MOON BAY

SITE AND BORING LOCATION PLAN DETAIL

FOOTHILL SQUARE SHOPPING CENTER
OAKLAND ALAMEDA, CA

December 12, 1994 | Figure 3

COORDINATE TABLE

N 70°28'30" E

WELL ID	EASTING(X)	NORTHING(Y)	ELEV (MSL)
MW-1	817.5114	6944.5496	56.00'
MW-4	851.6791	6873.0512	56.04'
MW-3	880.7510	6864.2822	56.62'
MW-7 (N RIM)	879.0952	6778.0119	58.64'
MW-6 (N RIM)	955.8804	6848.3060	61.78'
WGR-MW2	1145.0200	6993.7389	63.18'
AMW-1	1193.3727	6979.2005	64.51'
AMW-2	1312.5906	6877.8287	65.33'
AMW-3	1356.7127	6888.9413	65.09'
UNKNOWN #1(N RIM)	1464.9458	7240.1577	66.56'
UNKNOWN #2(N RIM)	1802.9764	6931.7572	69.31'
B-1	1225.0645	7001.9263	N/A
B-2	1210.6547	7026.7806	N/A
B-3	1307.9159	6867.9305	N/A
B-4	1326.8757	6874.8507	N/A
B-5	1344.7276	6879.6445	N/A
B-6	1336.1303	6891.3611	N/A
B-7	1347.6508	6901.0199	N/A
B-8	1238.2948	6898.7060	N/A
WGR MW-3 (N RIM)	892.6101	6787.3101	58.34'
WGR MW-4 (N RIM)	1206.7733	6590.3851	60.02'

Table 2

Summary of Soil Analytical Results

Young's Cleaners
10700 MacArthur Boulevard
Oakland, CA

(all results expressed in µg /Kg except where noted)

Sample Identification	Sample Matrix	Sample Date	Analysis Date	Gasoline (1)	Stoddard Solvent (2)	Tetra-Chloroethene (PCE) (3)	Benzene (4)	Toluene (4)	Ethyl-Benzene (4)	Xylenes (5)
B-2 - 6'	Soil	9-12-94	9-16-94	ND	ND	ND	ND	6	ND	ND
B-2 - 11'	Soil	9-12-94	9-16-94	ND	ND	ND	ND	ND	ND	ND
B-2 - 16'	Soil	9-12-94	9-16-94	ND	ND	ND	ND	ND	ND	ND
B-2 - 21'	Soil	9-12-94	9-16-94	ND	ND	ND	ND	ND	ND	ND
B-2 - 24'	Soil	9-12-94	9-19-94	ND	ND	ND	ND	ND	ND	ND
B-3 - 6'	Soil	10-7-94	10-13-94	NA	ND	15	ND	ND	ND	ND
B-3 - 13'	Soil	10-7-94	10-13-94	NA	ND	ND	ND	ND	ND	ND
B-3 - 16'	Soil	10-7-94	10-13-94	NA	ND	12	ND	ND	ND	ND
B-3 - 21'	Soil	10-7-94	10-13-94	NA	ND	27	ND	ND	ND	ND
B-4 - 5.5'	Soil	10-7-94	10-13-94	NA	ND	1,600	ND	7	ND	ND
B-4 - 11'	Soil	10-7-94	10-13-94	NA	ND	70	ND	ND	ND	ND
B-4 - 16'	Soil	10-7-94	10-13-94	NA	ND	100	ND	10	ND	ND
B-4 - 21'	Soil	10-7-94	10-13-94	NA	ND	30	ND	ND	ND	ND
B-5 - 6'	Soil	11-3-94	11-10-94	NA	NA	1600	NA	NA	NA	NA
B5 - 10.5'	Soil	11-3-94	11-9-94	NA	NA	450	NA	NA	NA	NA
B5 - 15.5'	Soil	11-3-94	11-9-94	NA	NA	440	NA	NA	NA	NA
B5 - 20.5'	Soil	11-3-94	11-9-94	NA	NA	ND	NA	NA	NA	NA
B5 - 25.5'	Soil	11-3-94	11-10-94	NA	NA	ND	NA	NA	NA	NA

Continued

(1): Gasoline by EPA method 8015/5030. Sample Quantification Limit (SQL) of 0.5 mg/Kg.
(2): Stoddard Solvent by EPA method 8015 modified. SQL of 1.0 mg/Kg.
(3): Tetrachloroethene by EPA SW-846 methods 5030 /8010. SQL of 5 µg/Kg.
(4): By method 8020. SQL of 5 µg/Kg.
(5) : By method 8020. SQL of 10 µg/Kg.
ND: Not detected at the Sample Quantification Limit.
NA: Not analyzed for this parameter.

Table 2

Summary of Soil Analytical Results

Young's Cleaners
10700 MacArthur Boulevard
Oakland, CA

(all results expressed in µg /Kg except where noted)

Sample Identification	Sample Matrix	Sample Date	Analysis Date	Gasoline (1)	Stoddard Solvent (2)	Tetra-Chloroethene (PCE) (3)	Benzene (4)	Toluene (4)	Ethyl-Benzene (4)	Xylenes (5)
B6 - 10.5'	Soil	11-3-94	11-10-94	NA	NA	5000	NA	NA	NA	NA
B6 - 15'	Soil	11-3-94	11-10-94	NA	NA	590	NA	NA	NA	NA
B6 - 20.5'	Soil	11-3-94	11-10-94	NA	NA	ND	NA	NA	NA	NA
B6 - 25.5'	Soil	11-3-94	11-10-94	NA	NA	ND	NA	NA	NA	NA
B7 - 10.5'	Soil	11-30-94	11-30-94	NA	NA	38	NA	NA	NA	NA
B7 - 15.5	Soil	11-30-94	11-30-94	NA	NA	60	NA	NA	NA	NA
B7 - 20.5'	Soil	11-30-94	11-30-94	NA	NA	ND	NA	NA	NA	NA
B7 - 25.5'	Soil	11-30-94	11-30-94	NA	NA	ND	NA	NA	NA	NA
AMW-1-4'	Soil	9-12-94	9-15-94	ND	ND	ND	ND	ND	ND	ND
AMW-1-6'	Soil	9-12-94	9-15-94	ND	ND	ND	ND	ND	ND	ND
AMW-1-11'	Soil	9-12-94	9-15-94	ND	ND	ND	ND	ND	ND	ND
AMW-1-16'	Soil	9-12-94	9-15-94	ND	ND	ND	ND	6	ND	18
AMW-1-21'	Soil	9-12-94	9-15-94	ND	ND	ND	ND	6	ND	ND
AMW-1-26'	Soil	9-12-94	9-15-94	ND	ND	ND	ND	ND	ND	ND
AMW-1-31'	Soil	9-12-94	9-15-94	ND	ND	ND	ND	ND	ND	ND
AMW-1-34'	Soil	9-12-94	9-15-94	ND	ND	ND	ND	ND	ND	ND
AMW-2-10'	Soil	9-30-94	10-6-94	NA	ND	22,000	ND	ND	ND	ND
AMW-2-15'	Soil	9-30-94	10-6-94	NA	ND	90,000	ND	ND	ND	ND
AMW-2-20'	Soil	9-30-94	10-6-94	NA	ND	400	ND	ND	ND	ND
AMW-2-25'	Soil	9-30-94	10-6-94	NA	ND	30	ND	ND	ND	ND

(1): Gasoline by EPA method 8015/5030. Sample Quantification Limit (SQL) of 0.5 mg/Kg.
(2): Stoddard Solvent by EPA method 8015 modified SQL of 1.0 mg/Kg.
(3): Tetrachloroethene by EPA SW-846 methods 5030 /8010. SQL of 5 µg/Kg.
(4): By method 8020. SQL of 5 µg/Kg.
(5) : By method 8020. SQL of 10 µg/Kg.
ND: Not detected at the Sample Quantification Limit.
NA: Not analyzed for this parameter.

Table 2

Summary of Soil Analytical Results

Young's Cleaners
10700 MacArthur Boulevard
Oakland, CA

(all results expressed in µg /Kg except where noted)

Sample Identification	Sample Matrix	Sample Date	Analysis Date	Gasoline (1)	Stoddard Solvent (2)	Tetra-Chloroethene (PCE) (3)	Benzene (4)	Toluene (4)	Ethyl-Benzene (4)	Xylenes (5)
AMW-3-5.5'	Soil	11-18-94	11-21-94	NA	NA	6	NA	NA	NA	NA
AMW-3-10'	Soil	11-18-94	11-21-94	NA	NA	390	NA	NA	NA	NA
AMW-3-15.5'	Soil	11-18-94	11-21-94	NA	NA	59	NA	NA	NA	NA
AMW-3-20.5'	Soil	11-18-94	11-21-94	NA	NA	820	NA	NA	NA	NA
AMW-3-25.5'	Soil	11-18-94	11-21-94	NA	NA	1400	NA	NA	NA	NA
AMW-4, 5.5'-6'	Soil	3-22-95	3-23-95	NA	NA	870	NA	NA	NA	NA
AMW-4, 10.5-11	Soil	3-22-95	3-23-95	NA	NA	13	NA	NA	NA	NA
AMW-4, 15.5-16	Soil	3-22-95	3-23-95	NA	NA	7.5	NA	NA	NA	NA
AMW-4, 20.5'-21'	Soil	3-22-95	3-23-95	NA	NA	5.3	NA	NA	NA	NA
AMW-4, 25.5'-26'	Soil	3-22-95	3-23-95	NA	NA	<0.5	NA	NA	NA	NA
AMW-5, 5.5'-6'	Soil	3-22-95	3-23-95	NA	NA	1.1	NA	NA	NA	NA
AMW-5, 10.5-11	Soil	3-22-95	3-23-95	NA	NA	<0.5	NA	NA	NA	NA
AMW-5, 15.5-16	Soil	3-22-95	3-23-95	NA	NA	<0.5	NA	NA	NA	NA
AMW-5, 20.5'-21'	Soil	3-22-95	3-23-95	NA	NA	<0.5	NA	NA	NA	NA
AMW-5, 25.5'-26'	Soil	3-22-95	3-23-95	NA	NA	<0.5	NA	NA	NA	NA
AMW-5, 30.5'-31'	Soil	3-22-95	3-23-95	NA	NA	<0.5	NA	NA	NA	NA

(1): Gasoline by EPA method 8015/5030. Sample Quantification Limit (SQL) of 0.5 mg/Kg.
(2): Stoddard Solvent by EPA method 8015 modified SQL of 1.0 mg/Kg.
(3): Tetrachloroethene by EPA SW-846 methods 5030 /8010. SQL of 5 µg/Kg.
(4): By method 8020. SQL of 5 µg/Kg.
(5) : By method 8020. SQL of 10 µg/Kg.
ND: Not detected at the Sample Quantification Limit.
NA: Not analyzed for this parameter.

Table 2

Summary of Soil Analytical Results

Young's Cleaners
10700 MacArthur Boulevard
Oakland, CA

(all results expressed in µg /Kg except where noted)

Sample Identification	Sample Matrix	Sample Date	Analysis Date	Gasoline (1)	Stoddard Solvent (2)	Tetra-Chloroethene (PCE) (3)	Benzene (4)	Toluene (4)	Ethyl-Benzene (4)	Xylenes (5)
B-2 - 6'	Soil	9-12-94	9-16-94	ND	ND	ND	ND	6	ND	ND
B-2 - 11'	Soil	9-12-94	9-16-94	ND	ND	ND	ND	ND	ND	ND
B-2 - 16'	Soil	9-12-94	9-16-94	ND	ND	ND	ND	ND	ND	ND
B-2 - 21'	Soil	9-12-94	9-16-94	ND	ND	ND	ND	ND	ND	ND
B-2 - 24'	Soil	9-12-94	9-19-94	ND	ND	ND	ND	ND	ND	ND
B-3 - 6'	Soil	10-7-94	10-13-94	NA	ND	15	ND	ND	ND	ND
B-3 - 13'	Soil	10-7-94	10-13-94	NA	ND	ND	ND	ND	ND	ND
B-3 - 16'	Soil	10-7-94	10-13-94	NA	ND	12	ND	ND	ND	ND
B-3 - 21'	Soil	10-7-94	10-13-94	NA	ND	27	ND	ND	ND	ND
B-4 - 5.5'	Soil	10-7-94	10-13-94	NA	ND	1,600	ND	7	ND	ND
B-4 - 11'	Soil	10-7-94	10-13-94	NA	ND	70	ND	ND	ND	ND
B-4 - 16'	Soil	10-7-94	10-13-94	NA	ND	100	ND	10	ND	ND
B-4 - 21'	Soil	10-7-94	10-13-94	NA	ND	30	ND	ND	ND	ND
B-5 - 6'	Soil	11-3-94	11-10-94	NA	NA	1600	NA	NA	NA	NA
B5 - 10.5'	Soil	11-3-94	11-9-94	NA	NA	450	NA	NA	NA	NA
B5 - 15.5'	Soil	11-3-94	11-9-94	NA	NA	440	NA	NA	NA	NA
B5 - 20.5'	Soil	11-3-94	11-9-94	NA	NA	ND	NA	NA	NA	NA
B5 - 25.5'	Soil	11-3-94	11-10-94	NA	NA	ND	NA	NA	NA	NA

Continued

(1): Gasoline by EPA method 8015/5030. Sample Quantification Limit (SQL) of 0.5 mg/Kg.
(2): Stoddard Solvent by EPA method 8015 modified. SQL of 1.0 mg/Kg.
(3): Tetrachloroethene by EPA SW-846 methods 5030 /8010. SQL of 5 µg/Kg.
(4): By method 8020. SQL of 5 µg/Kg.
(5) : By method 8020. SQL of 10 µg/Kg.
ND: Not detected at the Sample Quantification Limit.
NA: Not analyzed for this parameter.

Table 2

Summary of Soil Analytical Results

Young's Cleaners
10700 MacArthur Boulevard
Oakland, CA

(all results expressed in µg /Kg except where noted)

Sample Identification	Sample Matrix	Sample Date	Analysis Date	Gasoline (1)	Stoddard Solvent (2)	Tetra-Chloroethene (PCE) (3)	Benzene (4)	Toluene (4)	Ethyl-Benzene (4)	Xylenes (5)
B6 - 10.5'	Soil	11-3-94	11-10-94	NA	NA	5000	NA	NA	NA	NA
B6 - 15'	Soil	11-3-94	11-10-94	NA	NA	590	NA	NA	NA	NA
B6 - 20.5'	Soil	11-3-94	11-10-94	NA	NA	ND	NA	NA	NA	NA
B6 - 25.5'	Soil	11-3-94	11-10-94	NA	NA	ND	NA	NA	NA	NA
B7 - 10.5'	Soil	11-30-94	11-30-94	NA	NA	38	NA	NA	NA	NA
B7 - 15.5	Soil	11-30-94	11-30-94	NA	NA	60	NA	NA	NA	NA
B7 - 20.5'	Soil	11-30-94	11-30-94	NA	NA	ND	NA	NA	NA	NA
B7 - 25.5'	Soil	11-30-94	11-30-94	NA	NA	ND	NA	NA	NA	NA
AMW-1-4'	Soil	9-12-94	9-15-94	ND	ND	ND	ND	ND	ND	ND
AMW-1-6'	Soil	9-12-94	9-15-94	ND	ND	ND	ND	ND	ND	ND
AMW-1-11'	Soil	9-12-94	9-15-94	ND	ND	ND	ND	ND	ND	ND
AMW-1-16'	Soil	9-12-94	9-15-94	ND	ND	ND	ND	6	ND	18
AMW-1-21'	Soil	9-12-94	9-15-94	ND	ND	ND	ND	6	ND	ND
AMW-1-26'	Soil	9-12-94	9-15-94	ND	ND	ND	ND	ND	ND	ND
AMW-1-31'	Soil	9-12-94	9-15-94	ND	ND	ND	ND	ND	ND	ND
AMW-1-34'	Soil	9-12-94	9-15-94	ND	ND	ND	ND	ND	ND	ND
AMW-2-10'	Soil	9-30-94	10-6-94	NA	ND	22,000	ND	ND	ND	ND
AMW-2-15'	Soil	9-30-94	10-6-94	NA	ND	90,000	ND	ND	ND	ND
AMW-2-20'	Soil	9-30-94	10-6-94	NA	ND	400	ND	ND	ND	ND
AMW-2-25'	Soil	9-30-94	10-6-94	NA	ND	30	ND	ND	ND	ND

(1): Gasoline by EPA method 8015/5030. Sample Quantification Limit (SQL) of 0.5 mg/Kg.
(2): Stoddard Solvent by EPA method 8015 modified SQL of 1.0 mg/Kg.
(3): Tetrachloroethene by EPA SW-846 methods 5030 /8010. SQL of 5 µg/Kg.
(4): By method 8020. SQL of 5 µg/Kg.
(5) : By method 8020. SQL of 10 µg/Kg.
ND: Not detected at the Sample Quantification Limit.
NA: Not analyzed for this parameter.

Table 2

Summary of Soil Analytical Results

Young's Cleaners
10700 MacArthur Boulevard
Oakland, CA

(all results expressed in µg /Kg except where noted)

Sample Identification	Sample Matrix	Sample Date	Analysis Date	Gasoline (1)	Stoddard Solvent (2)	Tetra-Chloroethene (PCE) (3)	Benzene (4)	Toluene (4)	Ethyl-Benzene (4)	Xylenes (5)
AMW-3-5.5'	Soil	11-18-94	11-21-94	NA	NA	6	NA	NA	NA	NA
AMW-3-10'	Soil	11-18-94	11-21-94	NA	NA	390	NA	NA	NA	NA
AMW-3-15.5'	Soil	11-18-94	11-21-94	NA	NA	59	NA	NA	NA	NA
AMW-3-20.5'	Soil	11-18-94	11-21-94	NA	NA	820	NA	NA	NA	NA
AMW-3-25.5'	Soil	11-18-94	11-21-94	NA	NA	1400	NA	NA	NA	NA
AMW-4, 5.5'-6'	Soil	3-22-95	3-23-95	NA	NA	870	NA	NA	NA	NA
AMW-4, 10.5-11	Soil	3-22-95	3-23-95	NA	NA	13	NA	NA	NA	NA
AMW-4, 15.5-16	Soil	3-22-95	3-23-95	NA	NA	7.5	NA	NA	NA	NA
AMW-4, 20.5'-21'	Soil	3-22-95	3-23-95	NA	NA	5.3	NA	NA	NA	NA
AMW-4, 25.5'-26'	Soil	3-22-95	3-23-95	NA	NA	<0.5	NA	NA	NA	NA
AMW-5, 5.5'-6'	Soil	3-22-95	3-23-95	NA	NA	1.1	NA	NA	NA	NA
AMW-5, 10.5-11	Soil	3-22-95	3-23-95	NA	NA	<0.5	NA	NA	NA	NA
AMW-5, 15.5-16	Soil	3-22-95	3-23-95	NA	NA	<0.5	NA	NA	NA	NA
AMW-5, 20.5'-21'	Soil	3-22-95	3-23-95	NA	NA	<0.5	NA	NA	NA	NA
AMW-5, 25.5'-26'	Soil	3-22-95	3-23-95	NA	NA	<0.5	NA	NA	NA	NA
AMW-5, 30.5'-31'	Soil	3-22-95	3-23-95	NA	NA	<0.5	NA	NA	NA	NA

(1): Gasoline by EPA method 8015/5030. Sample Quantification Limit (SQL) of 0.5 mg/Kg.
(2): Stoddard Solvent by EPA method 8015 modified SQL of 1.0 mg/Kg.
(3): Tetrachloroethene by EPA SW-846 methods 5030 /8010. SQL of 5 µg/Kg.
(4): By method 8020. SQL of 5 µg/Kg.
(5) : By method 8020. SQL of 10 µg/Kg.
ND: Not detected at the Sample Quantification Limit.
NA: Not analyzed for this parameter.

Table 3
Summary of Groundwater Analytical Results

Youngs Cleaners
10700 MacArthur Boulevard
Oakland, CA

(all results expressed in µg/L except where noted)

Sample ID	Date	TPHs[2] No MCL listed	1,1-DCE[3] MCL= 6 µg/L	c-1,2-DCE MCL= 6 µg/L	t-1,2-DCE MCL= 10µg/L	TCE[5] MCL= 5 µg/L	c-1,3-DCP[6] No MCL listed	1,1,2-TCA[7] MCL= 32 µg/L	PCE[8] MCL= 5 µg/L
WGR MW-2 (1)	2/10/94	<50	ND[10]	ND	ND	ND	ND	ND	ND
	3/23/95	NA	NA	ND	ND	ND	ND	ND	ND
WGR MW3 (1)	2/10/94	NA[9]	<0.5	ND	ND	ND	ND	ND	ND
	3/24/95	NA	NA	ND	ND	ND	ND	ND	7.8
WGR-MW-4	3/24/95	NA	ND	ND	ND	ND	ND	ND	ND
AMW-1	10/04/94	ND	ND	0.5	ND	ND	ND	ND	ND
	3/23/95	NA	NA	0.5	ND	ND	ND	ND	ND
AMW-2	10/04/94	200	8	110	50	320	4.2	ND	28,000
	10/18/94	<50	<0.5		ND	ND	ND	ND	18,000
	11/08/94	NA	<0.5		ND	ND	ND	ND	35,000
	3/23/95	NA	NA	ND	ND	ND	ND	ND	13,000
AMW-3	11/28/94	NA	ND		ND	ND	ND	ND	22
	3/23/95	NA	ND	ND	ND	ND	ND	ND	45
B-4, grab	10/07/94	NA	4.2	130	19	180	11	14	11,000
B-5, grab	11/03/94	NA	ND	ND	ND	ND	ND	ND	1,000
B-6, grab	11/03/94	NA	ND	ND	ND	ND	ND	ND	870
B-7, grab	11/23/94	NA	ND	ND	ND	ND	ND	ND	19
B-8, grab	3/23/95	NA	ND	ND	ND	ND	ND	ND	1.1
AMW-4, grab	3/22/95	NA	ND	ND	ND	ND	ND	ND	33
AMW-5, grab	3/22/95	NA	ND	ND	ND	ND	ND	ND	1.1
WGR-MW-4	3/24/95	NA	ND	ND	ND	ND	ND	ND	21
MW-6	3/24/95	NA	ND	ND	ND	ND	ND	ND	2,000
MW-7	3/24/95	NA	ND	ND	ND	ND	ND	ND	21

(1) Wells WGR MW-2 and WGR MW-3 were analyzed for EPA 8240 compounds; none were detected
(2) TPHs =Total Petroleum Hydrocarbons as stoddard solvent (3) 1,1-Dichloroethene
(4) total 1,2-Dichloroethene (5) Trichloroethene (6) cis 1,2-Dichloropropene
(7) 1,1,2-Trichloroethane (8) Tetrachloroethene (9) Not Analyzed
(10) Not Detectable at laboratory detection limits. Detection limits vary with analyte and concentration.

Table 3
Summary of Groundwater Analytical Results

Youngs Cleaners
10700 MacArthur Boulevard
Oakland, CA

(all results expressed in µg/L except where noted)

Sample ID	Date	TPHs[2] No MCL listed	1,1-DCE[3] MCL= 6 µg/L	c-1,2-DCE MCL= 6 µg/L	t-1,2-DCE MCL= 10µg/L	TCE[5] MCL= 5 µg/L	c-1,3-DCP[6] No MCL listed	1,1,2-TCA[7] MCL= 32 µg/L	PCE[8] MCL= 5 µg/L
WGR MW-2 (1)	2/10/94	<50	ND[10]	ND	ND	ND	ND	ND	ND
	3/23/95	NA	NA	ND	ND	ND	ND	ND	ND
WGR MW3 (1)	2/10/94	NA[9]	<0.5	ND	ND	ND	ND	ND	ND
	3/24/95	NA	NA	ND	ND	ND	ND	ND	7.8
WGR-MW-4	3/24/95	NA	ND	ND	ND	ND	ND	ND	ND
AMW-1	10/04/94	ND	ND	0.5	ND	ND	ND	ND	ND
	3/23/95	NA	NA	0.5	ND	ND	ND	ND	ND
AMW-2	10/04/94	200	8	110	50	320	4.2	ND	28,000
	10/18/94	<50	<0.5		ND	ND	ND	ND	18,000
	11/08/94	NA	<0.5		ND	ND	ND	ND	35,000
	3/23/95	NA	NA	ND	ND	ND	ND	ND	13,000
AMW-3	11/28/94	NA	ND		ND	ND	ND	ND	22
	3/23/95	NA	ND	ND	ND	ND	ND	ND	45
B-4, grab	10/07/94	NA	4.2	130	19	180	11	14	11,000
B-5, grab	11/03/94	NA	ND	ND	ND	ND	ND	ND	1,000
B-6, grab	11/03/94	NA	ND	ND	ND	ND	ND	ND	870
B-7, grab	11/23/94	NA	ND	ND	ND	ND	ND	ND	19
B-8, grab	3/23/95	NA	ND	ND	ND	ND	ND	ND	1.1
AMW-4, grab	3/22/95	NA	ND	ND	ND	ND	ND	ND	33
AMW-5, grab	3/22/95	NA	ND	ND	ND	ND	ND	ND	1.1
WGR-MW-4	3/24/95	NA	ND	ND	ND	ND	ND	ND	21
MW-6	3/24/95	NA	ND	ND	ND	ND	ND	ND	2,000
MW-7	3/24/95	NA	ND	ND	ND	ND	ND	ND	21

(1) Wells WGR MW-2 and WGR MW-3 were analyzed for EPA 8240 compounds; none were detected
(2) TPHs =Total Petroleum Hydrocarbons as stoddard solvent (3) 1,1-Dichloroethene
(4) total 1,2-Dichloroethene (5) Trichloroethene (6) cis 1,2-Dichloropropene
(7) 1,1,2-Trichloroethane (8) Tetrachloroethene (9) Not Analyzed
(10) Not Detectable at laboratory detection limits. Detection limits vary with analyte and concentration.

Table 3
Summary of Groundwater Analytical Results

Youngs Cleaners
10700 MacArthur Boulevard
Oakland, CA

(all results expressed in µg/L except where noted)

Sample ID	Date	TPHs[2] No MCL listed	1,1-DCE[3] MCL= 6 µg/L	c-1,2-DCE MCL= 6 µg/L	t-1,2-DCE MCL= 10µg/L	TCE[5] MCL= 5 µg/L	c-1,3-DCP[6] No MCL listed	1,1,2-TCA[7] MCL= 32 µg/L	PCE[8] MCL= 5 µg/L
WGR MW-2 (1)	2/10/94	<50	ND[10]	ND	ND	ND	ND	ND	ND
	3/23/95	NA	NA	ND	ND	ND	ND	ND	ND
WGR MW3 (1)	2/10/94	NA[9]	<0.5	ND	ND	ND	ND	ND	ND
	3/24/95	NA	NA	ND	ND	ND	ND	ND	7.8
WGR-MW-4	3/24/95	NA	ND	ND	ND	ND	ND	ND	ND
AMW-1	10/04/94	ND	ND	0.5	ND	ND	ND	ND	ND
	3/23/95	NA	NA	0.5	ND	ND	ND	ND	ND
AMW-2	10/04/94	200	8	110	50	320	4.2	ND	28,000
	10/18/94	<50	<0.5		ND	ND	ND	ND	18,000
	11/08/94	NA	<0.5		ND	ND	ND	ND	35,000
	3/23/95	NA	NA	ND	ND	ND	ND	ND	13,000
AMW-3	11/28/94	NA	ND		ND	ND	ND	ND	22
	3/23/95	NA	ND	ND	ND	ND	ND	ND	45
B-4, grab	10/07/94	NA	4.2	130	19	180	11	14	11,000
B-5, grab	11/03/94	NA	ND	ND	ND	ND	ND	ND	1,000
B-6, grab	11/03/94	NA	ND	ND	ND	ND	ND	ND	870
B-7, grab	11/23/94	NA	ND	ND	ND	ND	ND	ND	19
B-8, grab	3/23/95	NA	ND	ND	ND	ND	ND	ND	1.1
AMW-4, grab	3/22/95	NA	ND	ND	ND	ND	ND	ND	33
AMW-5, grab	3/22/95	NA	ND	ND	ND	ND	ND	ND	1.1
WGR-MW-4	3/24/95	NA	ND	ND	ND	ND	ND	ND	21
MW-6	3/24/95	NA	ND	ND	ND	ND	ND	ND	2,000
MW-7	3/24/95	NA	ND	ND	ND	ND	ND	ND	21

(1) Wells WGR MW-2 and WGR MW-3 were analyzed for EPA 8240 compounds; none were detected
(2) TPHs =Total Petroleum Hydrocarbons as stoddard solvent (3) 1,1-Dichloroethene
(4) total 1,2-Dichloroethene (5) Trichloroethene (6) cis 1,2-Dichloropropene
(7) 1,1,2-Trichloroethane (8) Tetrachloroethene (9) Not Analyzed
(10) Not Detectable at laboratory detection limits. Detection limits vary with analyte and concentration.

Table 3
Summary of Groundwater Analytical Results

Youngs Cleaners
10700 MacArthur Boulevard
Oakland, CA

(all results expressed in µg/L except where noted)

Sample ID	Date	TPHs[2] No MCL listed	1,1-DCE[3] MCL= 6 µg/L	c-1,2-DCE MCL= 6 µg/L	t-1,2-DCE MCL= 10µg/L	TCE[5] MCL= 5 µg/L	c-1,3-DCP[6] No MCL listed	1,1,2-TCA[7] MCL= 32 µg/L	PCE[8] MCL= 5 µg/L
WGR MW-2 (1)	2/10/94	<50	ND[10]	ND	ND	ND	ND	ND	ND
	3/23/95	NA	NA	ND	ND	ND	ND	ND	ND
WGR MW3 (1)	2/10/94	NA[9]	<0.5	ND	ND	ND	ND	ND	ND
	3/24/95	NA	NA	ND	ND	ND	ND	ND	7.8
WGR-MW-4	3/24/95	NA	ND	ND	ND	ND	ND	ND	ND
AMW-1	10/04/94	ND	ND	0.5	ND	ND	ND	ND	ND
	3/23/95	NA	NA	0.5	ND	ND	ND	ND	ND
AMW-2	10/04/94	200	8	110	50	320	4.2	ND	28,000
	10/18/94	<50	<0.5		ND	ND	ND	ND	18,000
	11/08/94	NA	<0.5		ND	ND	ND	ND	35,000
	3/23/95	NA	NA	ND	ND	ND	ND	ND	13,000
AMW-3	11/28/94	NA	ND		ND	ND	ND	ND	22
	3/23/95	NA	ND	ND	ND	ND	ND	ND	45
B-4, grab	10/07/94	NA	4.2	130	19	180	11	14	11,000
B-5, grab	11/03/94	NA	ND	ND	ND	ND	ND	ND	1,000
B-6, grab	11/03/94	NA	ND	ND	ND	ND	ND	ND	870
B-7, grab	11/23/94	NA	ND	ND	ND	ND	ND	ND	19
B-8, grab	3/23/95	NA	ND	ND	ND	ND	ND	ND	1.1
AMW-4, grab	3/22/95	NA	ND	ND	ND	ND	ND	ND	33
AMW-5, grab	3/22/95	NA	ND	ND	ND	ND	ND	ND	1.1
WGR-MW-4	3/24/95	NA	ND	ND	ND	ND	ND	ND	21
MW-6	3/24/95	NA	ND	ND	ND	ND	ND	ND	2,000
MW-7	3/24/95	NA	ND	ND	ND	ND	ND	ND	21

(1) Wells WGR MW-2 and WGR MW-3 were analyzed for EPA 8240 compounds; none were detected
(2) TPHs =Total Petroleum Hydrocarbons as stoddard solvent (3) 1,1-Dichloroethene
(4) total 1,2-Dichloroethene (5) Trichloroethene (6) cis 1,2-Dichloropropene
(7) 1,1,2-Trichloroethane (8) Tetrachloroethene (9) Not Analyzed
(10) Not Detectable at laboratory detection limits. Detection limits vary with analyte and concentration.

Table 2

Summary of Soil Analytical Results

Young's Cleaners
10700 MacArthur Boulevard
Oakland, CA

(all results expressed in µg /Kg except where noted)

Sample Identification	Sample Matrix	Sample Date	Analysis Date	Gasoline (1)	Stoddard Solvent (2)	Tetra-Chloroethene (PCE) (3)	Benzene (4)	Toluene (4)	Ethyl-Benzene (4)	Xylenes (5)
B-2 - 6'	Soil	9-12-94	9-16-94	ND	ND	ND	ND	6	ND	ND
B-2 - 11'	Soil	9-12-94	9-16-94	ND	ND	ND	ND	ND	ND	ND
B-2 - 16'	Soil	9-12-94	9-16-94	ND	ND	ND	ND	ND	ND	ND
B-2 - 21'	Soil	9-12-94	9-16-94	ND	ND	ND	ND	ND	ND	ND
B-2 - 24'	Soil	9-12-94	9-19-94	ND	ND	ND	ND	ND	ND	ND
B-3 - 6'	Soil	10-7-94	10-13-94	NA	ND	15	ND	ND	ND	ND
B-3 - 13'	Soil	10-7-94	10-13-94	NA	ND	ND	ND	ND	ND	ND
B-3 - 16'	Soil	10-7-94	10-13-94	NA	ND	12	ND	ND	ND	ND
B-3 - 21'	Soil	10-7-94	10-13-94	NA	ND	27	ND	ND	ND	ND
B-4 - 5.5'	Soil	10-7-94	10-13-94	NA	ND	1,600	ND	7	ND	ND
B-4 - 11'	Soil	10-7-94	10-13-94	NA	ND	70	ND	ND	ND	ND
B-4 - 16'	Soil	10-7-94	10-13-94	NA	ND	100	ND	10	ND	ND
B-4 - 21'	Soil	10-7-94	10-13-94	NA	ND	30	ND	ND	ND	ND
B-5 - 6'	Soil	11-3-94	11-10-94	NA	NA	1600	NA	NA	NA	NA
B5 - 10.5'	Soil	11-3-94	11-9-94	NA	NA	450	NA	NA	NA	NA
B5 - 15.5'	Soil	11-3-94	11-9-94	NA	NA	440	NA	NA	NA	NA
B5 - 20.5'	Soil	11-3-94	11-9-94	NA	NA	ND	NA	NA	NA	NA
B5 - 25.5'	Soil	11-3-94	11-10-94	NA	NA	ND	NA	NA	NA	NA

Continued

(1): Gasoline by EPA method 8015/5030. Sample Quantification Limit (SQL) of 0.5 mg/Kg.
(2): Stoddard Solvent by EPA method 8015 modified. SQL of 1.0 mg/Kg.
(3): Tetrachloroethene by EPA SW-846 methods 5030 /8010. SQL of 5 µg/Kg.
(4): By method 8020. SQL of 5 µg/Kg.
(5) : By method 8020. SQL of 10 µg/Kg.
ND: Not detected at the Sample Quantification Limit.
NA: Not analyzed for this parameter.

Table 2

Summary of Soil Analytical Results

Young's Cleaners
10700 MacArthur Boulevard
Oakland, CA

(all results expressed in µg /Kg except where noted)

Sample Identification	Sample Matrix	Sample Date	Analysis Date	Gasoline (1)	Stoddard Solvent (2)	Tetra-Chloroethene (PCE) (3)	Benzene (4)	Toluene (4)	Ethyl-Benzene (4)	Xylenes (5)
B6 - 10.5'	Soil	11-3-94	11-10-94	NA	NA	5000	NA	NA	NA	NA
B6 - 15'	Soil	11-3-94	11-10-94	NA	NA	590	NA	NA	NA	NA
B6 - 20.5'	Soil	11-3-94	11-10-94	NA	NA	ND	NA	NA	NA	NA
B6 - 25.5'	Soil	11-3-94	11-10-94	NA	NA	ND	NA	NA	NA	NA
B7 - 10.5'	Soil	11-30-94	11-30-94	NA	NA	38	NA	NA	NA	NA
B7 - 15.5	Soil	11-30-94	11-30-94	NA	NA	60	NA	NA	NA	NA
B7 - 20.5'	Soil	11-30-94	11-30-94	NA	NA	ND	NA	NA	NA	NA
B7 - 25.5'	Soil	11-30-94	11-30-94	NA	NA	ND	NA	NA	NA	NA
AMW-1-4'	Soil	9-12-94	9-15-94	ND	ND	ND	ND	ND	ND	ND
AMW-1-6'	Soil	9-12-94	9-15-94	ND	ND	ND	ND	ND	ND	ND
AMW-1-11'	Soil	9-12-94	9-15-94	ND	ND	ND	ND	ND	ND	ND
AMW-1-16'	Soil	9-12-94	9-15-94	ND	ND	ND	ND	6	ND	18
AMW-1-21'	Soil	9-12-94	9-15-94	ND	ND	ND	ND	6	ND	ND
AMW-1-26'	Soil	9-12-94	9-15-94	ND	ND	ND	ND	ND	ND	ND
AMW-1-31'	Soil	9-12-94	9-15-94	ND	ND	ND	ND	ND	ND	ND
AMW-1-34'	Soil	9-12-94	9-15-94	ND	ND	ND	ND	ND	ND	ND
AMW-2-10'	Soil	9-30-94	10-6-94	NA	ND	22,000	ND	ND	ND	ND
AMW-2-15'	Soil	9-30-94	10-6-94	NA	ND	90,000	ND	ND	ND	ND
AMW-2-20'	Soil	9-30-94	10-6-94	NA	ND	400	ND	ND	ND	ND
AMW-2-25'	Soil	9-30-94	10-6-94	NA	ND	30	ND	ND	ND	ND

(1): Gasoline by EPA method 8015/5030. Sample Quantification Limit (SQL) of 0.5 mg/Kg.
(2): Stoddard Solvent by EPA method 8015 modified SQL of 1.0 mg/Kg.
(3): Tetrachloroethene by EPA SW-846 methods 5030 /8010. SQL of 5 µg/Kg.
(4): By method 8020. SQL of 5 µg/Kg.
(5) : By method 8020. SQL of 10 µg/Kg.
ND: Not detected at the Sample Quantification Limit.
NA: Not analyzed for this parameter.

Table 2

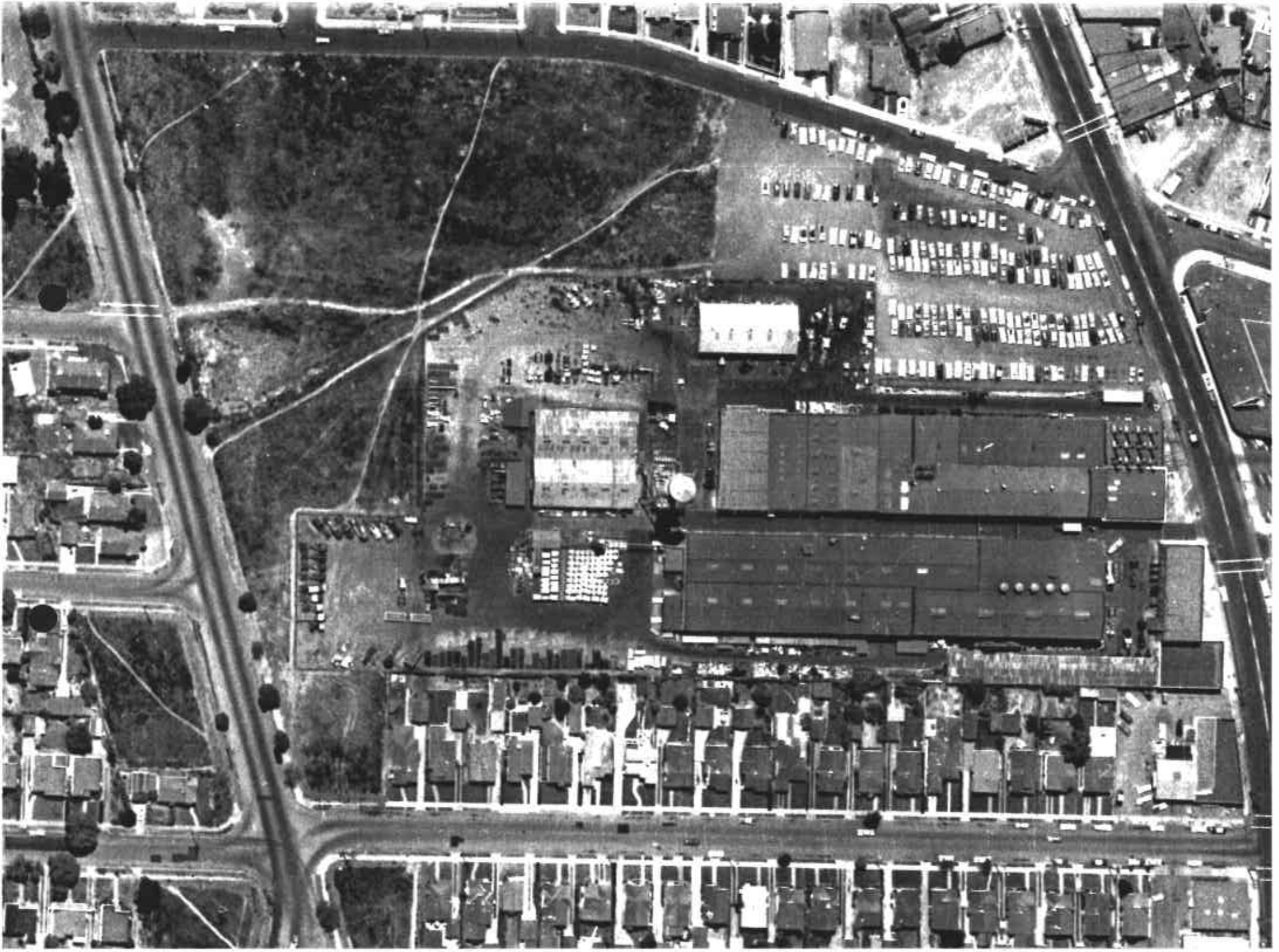
Summary of Soil Analytical Results

Young's Cleaners
10700 MacArthur Boulevard
Oakland, CA

(all results expressed in µg /Kg except where noted)

Sample Identification	Sample Matrix	Sample Date	Analysis Date	Gasoline (1)	Stoddard Solvent (2)	Tetra-Chloroethene (PCE) (3)	Benzene (4)	Toluene (4)	Ethyl-Benzene (4)	Xylenes (5)
AMW-3-5.5'	Soil	11-18-94	11-21-94	NA	NA	6	NA	NA	NA	NA
AMW-3-10'	Soil	11-18-94	11-21-94	NA	NA	390	NA	NA	NA	NA
AMW-3-15.5'	Soil	11-18-94	11-21-94	NA	NA	59	NA	NA	NA	NA
AMW-3-20.5'	Soil	11-18-94	11-21-94	NA	NA	820	NA	NA	NA	NA
AMW-3-25.5'	Soil	11-18-94	11-21-94	NA	NA	1400	NA	NA	NA	NA
AMW-4, 5.5'-6'	Soil	3-22-95	3-23-95	NA	NA	870	NA	NA	NA	NA
AMW-4, 10.5-11	Soil	3-22-95	3-23-95	NA	NA	13	NA	NA	NA	NA
AMW-4, 15.5-16	Soil	3-22-95	3-23-95	NA	NA	7.5	NA	NA	NA	NA
AMW-4, 20.5'-21'	Soil	3-22-95	3-23-95	NA	NA	5.3	NA	NA	NA	NA
AMW-4, 25.5'-26'	Soil	3-22-95	3-23-95	NA	NA	<0.5	NA	NA	NA	NA
AMW-5, 5.5'-6'	Soil	3-22-95	3-23-95	NA	NA	1.1	NA	NA	NA	NA
AMW-5, 10.5-11	Soil	3-22-95	3-23-95	NA	NA	<0.5	NA	NA	NA	NA
AMW-5, 15.5-16	Soil	3-22-95	3-23-95	NA	NA	<0.5	NA	NA	NA	NA
AMW-5, 20.5'-21'	Soil	3-22-95	3-23-95	NA	NA	<0.5	NA	NA	NA	NA
AMW-5, 25.5'-26'	Soil	3-22-95	3-23-95	NA	NA	<0.5	NA	NA	NA	NA
AMW-5, 30.5'-31'	Soil	3-22-95	3-23-95	NA	NA	<0.5	NA	NA	NA	NA

(1): Gasoline by EPA method 8015/5030. Sample Quantification Limit (SQL) of 0.5 mg/Kg.
(2): Stoddard Solvent by EPA method 8015 modified SQL of 1.0 mg/Kg.
(3): Tetrachloroethene by EPA SW-846 methods 5030 /8010. SQL of 5 µg/Kg.
(4): By method 8020. SQL of 5 µg/Kg.
(5) : By method 8020. SQL of 10 µg/Kg.
ND: Not detected at the Sample Quantification Limit.
NA: Not analyzed for this parameter.



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Water Levels: 3-23, 3-24-45

WBR MW-2: 21.32'

AMW-1: 21.42'

AMW-2: 13.12'

AMW-3: 12.20'

AMW-4: 13.06'

AMW-5: 13.98'

WBR MW-4: 24.20'

Well ID	el. PVC	Depth to GW	el GW
AMW-1	64.51	21.42	43.04
AMW 2	65.33	13.12	52.21
AMW-3	65.03	12.20	52.83
AMW 4	69.42	13.06	51.86
AMW 5	65.11	13.98	51.13
WBR-MW2	63.18	21.32	41.86
WBR-MW-3	58.34	12.60	45.74
WBR-MW 4	60.02	24.20	35.82
MW 6	61.78	30.02	54.78
MW 7	58.64	15.52	43.12